

1992-1993  
CATALOGUE

# FUNGI PERFECTI



P.O. BOX 7634 OLYMPIA, WA 98507  
(206) 426-9292

## FUNGI **PERFECTI** (fun ji' per fect' i)

*the unofficial name for Subdivision hosting that we call mushrooms. Mushrooms are fleshy fungi that reproduce through sexual matings of spores. Asexually reproducing fungi, like *Penicillium*, typify the molds of the Fungi Imperfecti.*

**Fungi Perfecti** is a family owned business dedicated to promoting the cultivation of high quality gourmet mushrooms. In business since 1979 we have been instrumental in developing new technologies and markets for gourmet mushrooms throughout the world.

We keenly sense that fungi will play a pivotal role in new industries of the 21st Century. Gourmet mushrooms will continue to appeal to organic gardeners, commercial cultivators, researchers, nutritionalists, and ecological managers. Indeed, we foresee a quantum leap in their popularity when the public realizes these fungi

- **stimulate the immune system**, helping the human body resist and fight viral diseases and cancers
- **lower cholesterol levels**
- represent a **pesticide-free alternative** to the traditional white button mushroom
- are instrumental in **waste recycling** of wood products and by-products
- can easily be grown by everyone- outdoors in your garden or yard (**mycological landscaping**) -or indoors within greenhouses, solaria, or controlled environments.

Through our in-depth classes and information networks, we encourage the establishment of a constellation of independent, organically minded growers whose collective consciousness will define this emerging industry well into the next century. We hope you will join us in this endeavor. The future is ours.



"Quality Products for the  
Mushroom Cultivator and  
the Mushroom Collector"

**Hours 9am - 4pm PDT  
Mondays thru Fridays**



**Mission Statement: To encourage a continuing Revolution  
of ideas in the field of mycology.**

# Introduction

Only recently has the cultivation of exotic mushrooms become a practical endeavor. Cultivating mushrooms is not necessarily difficult - it requires only a willingness to learn, a little work, and adherence to some well defined guidelines. Most importantly, the mushroom cultivator needs continual access to accurate information and state-of-the-art technology.

Mushrooms can be grown throughout the year indoors or only during a few months outdoors.

One of the most exciting innovations in mushroom culture is a concept **Fungi Perfecti** has been instrumental in promoting: **Mycological Landscaping**. Mycological landscaping involves the cultivation of exotic mushrooms as beneficial companions to plants in gardens, lawns, or within woodlands. **Fungi Perfecti** has been actively searching the wild for candidates having strong appeal for their culinary value. Each year we clone dozens of species having gourmet appeal and test them at our research facility - indoors and outdoors. Imagine having a selection of choice exotic mushroom patches, protected in the privacy of your backyard, to be enjoyed through the seasons and perhaps through generations!

For everyone seriously contemplating mushroom cultivation as a business, we urge you to learn the sterile culture skills necessary for spawn production. You will be glad you did. Armed with the skills of sterile culture you:

- **reduce a substantial expense.**
- **are able to use more spawn per inoculation, thus accelerating the spawn run into the fruiting substrate. (For sawdust/compost cultivators, this also means the spawn can become the vehicle for nutritional supplementation.)**
- **gain invaluable insights into and sensitivity to the mushroom life cycle.**
- **eliminate an excuse for failure, thereby climbing the learning curve faster than competitors.**
- **control, select, and can improve on high yielding strains.**

A central text in helping the aspiring spawn maker to achieve these skill is **The Mushroom Cultivator**, a treatise we highly recommend.

We conduct intensive weekend seminars on mushroom cultivation at our exotic mushroom research facility. At these workshops there is a strong emphasis on laboratory technique and spawn generation. Since we are innovators in liquid inoculation techniques, these methods are explored in depth. Our seminars occur 4 times a year, and cost \$ 300 per person. Each participant receives a half dozen or more cultures in pure form for their own unrestricted use. Each attendee should be fully acquainted and prepared to generate their own spawn upon completion. Advanced seminars are also planned for those who have graduated from this first session. They are held semi-annually, in the Spring and Fall.



# FUNGI PERFECTI

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ORDERING HOURS: 24 HOURS PER DAY THROUGH OUR FAX.**

**International Mastercards & Visas Accepted.  
HERE TODAY, TOMORROW, AND THROUGH THE 21st CENTURY**

## I. HOW TO GROW MUSHROOMS

### A Simplified Overview of Mushroom Cultivation Strategies

Mushrooms reproduce through spores. In the highly competitive natural world, the chances of mushroom spores germinating and then producing a mushroom are slim. Within a laboratory, isolated from airborne contamination, the probability of success is much improved. What a cultivator does is to remove a select species from the fierce competition of outdoors into an optimized environment indoors wherein the mushroom mycelium grows unhindered from the ravages of nature. This harbor of quiet refuge is, in effect, the sterile laboratory. Contrary to popular belief, such an inoculation room can be easily constructed at modest expense within your home.

A mushroom culture can be taken from spores or from tissue. In germinating spores, many strains are formed, some compatible with one another, some not. In taking a tissue culture (clone) from a living mushroom, the cultivator preserves the exact genetic character of the contributing mushroom. With spores, a single strain must be selected from the multitude of strains created. In both cases, the result is a network of cells called, collectively, **the mushroom mycelium**.

Once a pure strain has been developed, the next step is to increase the **mycelial mass**. This is done by first growing the mycelium on enriched agar media in a petri dish and then on grain or sawdust/bran. On the flat, two dimensional plane of a petri dish, contaminants such as molds and bacteria become readily apparent. Since it is easy to see if mushroom mycelium is pure and free of contamination, experienced cultivators propagate mycelium in petri dishes and then inoculate grain or sawdust/bran that has been sterilized in jars. When these grain or sawdust filled jars (denoted as **G<sup>1</sup> Masters**) have grown through with mushroom mycelium, they are called SPAWN, and either can be individually used to inoculate another 10 to 20 more grain filled jars, designated as (**G<sup>2</sup>**), or to inoculate bulk substrates such as straw, wood, or compost. **G<sup>1</sup>** masters are best grown out in regular mouth quart mason jars; **G<sup>2</sup>** spawn is best grown out in regular mouth half gallon and/or gallon jars. Another generation of spawn, designated as **G<sup>3</sup>** can be created from **G<sup>2</sup>**, if desired. No more expansions from grain-to-grain transfers should be made beyond **G<sup>3</sup>** as contamination often can occur and not be detected until it is too late.

In contrast, liquid culture allows a cultivator to use as little as one mycelial culture from a single petri dish to inoculate hundreds of grain jars in a fraction of the time it takes with the above-described method. Of course, preferences vary with every cultivator. Mushroom tissue culture is a highly individualized art. However, **FP** promotes liquid culture as a revolutionary improvement over the more labor intensive, traditional methods.

With many species, grain spawn can be laid out into trays, cased with a moisture laden soil-like layer, and fruited. Once tissue culture is mastered, this is the simplest way to grow mushrooms. It is also a proven way to "screen" strains for their cultivation potential.

Since the biomass of mushroom mycelium will be exponentially multiplied from a small fragment of mycelium, the sterility of the laboratory is of paramount importance. Micron filters (used in laminar flow hoods) solve the problem of contamination in the laboratory and they more than pay for themselves considering the contamination they prevent and the cultures/time they save.

To the total beginner, sterile culture may seem too difficult an adventure to embark upon. The possible pitfalls of sterile culture can be avoided by buying ready-to-inoculate spawn until a familiarity with the process is attained. ***Ultimately, however, every cultivator should create their own spawn so they are not forever dependent upon others.***

Once pure spawn is obtained, the next step varies with the species being grown. Shiitake (***Lentinus edodes***) calls for the inoculation of oak logs or sawdust/bran blocks. Oyster mushrooms (***Pleurotus ostreatus***) fruit admirably on pasteurized straw. The King Stropharia or Garden Gaint (***Stropharia rugoso-annulata***) enjoys a habitat composed of wood chips and/or wheat straw. Morels (***Morchella*** spp.) are most easily grown outside in shady sawdust/ash beds. The Chinese Ling Chih, also known as the Japanese Reishi (***Ganoderma lucidum***) can be grown outdoors on logs buried in sawdust. Chicken-of-the-Woods (***Polyporus sulphureus***) can be grown on stumps, as can many other gourmet species. Lastly, the classic white button mushroom (***Agaricus brunnescens***) fruits on horse manure/straw compost. Most mushrooms capable of being cultivated will fruit on one of these aforementioned substrates.

After the mycelium has fully colonized the substrate, mushroom formation should be encouraged. In general, the key to fruiting mushrooms relies on altering the surrounding environment. To change a set of environmental variables in favor of mushroom formation is called an **Initiation Strategy**. Mushrooms form best when the

- **temperature for spawn run is lowered to a temperature plateau ideal for fruiting**
- **water is applied**
- **humidity is raised**
- **carbon dioxide is lowered by increasing air exchanges**
- **light is introduced & maintained (with few exceptions)**

Considerable variation exists between species in their fruiting requirements and this subject can not be adequately discussed here. Hence, we recommend the most comprehensive book on the subject, **THE MUSHROOM CULTIVATOR**, by Paul Stamets and J.S. Chilton. More books by Paul Stamets are being written detailing these concepts. By remaining in contact with Fungi Perfecti, you will be assured of having the lastest State-of-the-Art information and technology.

Good luck. May your fruitings be bountiful and your lives enriched by the experience of cultivation. Mushrooming is the best combination of a passionate Art and a rapidly emerging Science. Each one of you can make a contribution. We hope you do.

# OVERVIEW OF TECHNIQUES FOR THE CULTIVATION OF MUSHROOMS



## II. HOW TO PLACE AN ORDER

To place an order, fill out one of the order forms from the back of the catalogue listing the product number, description and price. Add the shipping costs using the preferred carrier (UPS or USPO - see the rate charts on pages 73 thru 77). If you can not determine the shipping costs of your order, please call. Upon entering your order into our system, a **customer number** will be assigned. This customer number will appear on all shipping labels, invoices, and correspondence. Please refer to it when making inquiries. Plan well in advance so our service can satisfy your expectations. Money orders, credit cards and wire transfers facilitate the shipment of your order. Personal checks may delay your order a few days, especially with large orders. Please Plan Ahead. Feel free to call to check on inventory and lead times. We want to give you the best possible service.

Generally orders are shipped within a week. For our **Priority #1 Service**, we guarantee shipment within 48 hours for an additional service charge of \$10.00. To receive this speedy handling, confirmation by phone must occur before placing your order. We guarantee your order will be shipped within 48 hours or the \$10.00 fee will be promptly refunded. Because of the large volumes for orders we are now processing and due to the urgency of some cultivator's needs, this policy has become mandatory.

**Purchase Orders:** We accept Purchase Orders from Universities and Schools only. We provide ProForma Invoices to companies.

### INTERNATIONAL CUSTOMERS

We ship to countries throughout the world every day, via air cargo on a "space available basis" through our brokerage firm Kuehne & Nagel, Seattle, Washington. Transit times are usually 3-6 days from time of shipment. The customer usually pays for shipping costs at the time the products are delivered. For example, a Series II Laminar Flow Hood cost \$230.00 to ship to Switzerland, a Series III costs \$310 to Germany. Six cartons of miscellaneous laboratory equipment weighing 400 lbs. cost \$325.00 to Holland. These prices fluctuate and we will inform the customer prior to shipment the exact cost incurred. All shipments are insured. All are marked "For Agricultural Use Only". Our FAX machine doesn't sleep. We do. **So, please FAX us your order at 206-426-9377 at any time.**



2000 Year Old Mexican Mushroom Stone

**Phone: 206-426-9292**

**Fax: 206-426-9377**

### III. Pre-Inoculated Mushroom Patches (Indoors)

**Fungi Perfecti** offers a wide variety of indoor mushroom patches, in kit form, for indoor cultivation. All of our kits are guaranteed to produce. Just follow the instructions, conscientiously mist them, and enjoy the fruits of your labors. Great for kids and adults.

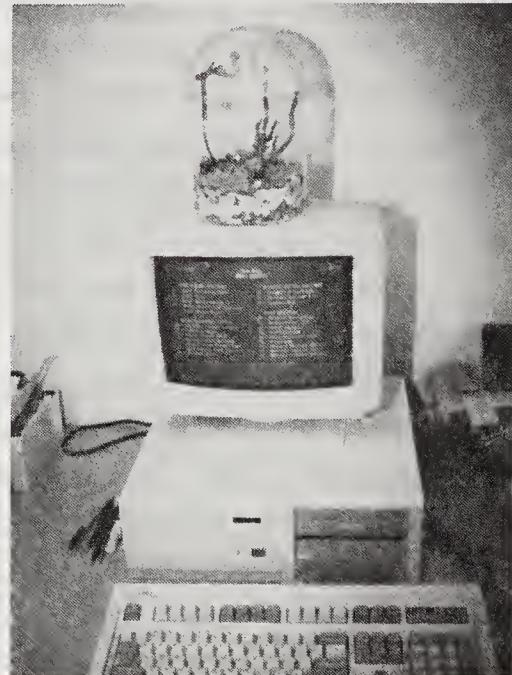
#### **The PC Compatible Reishi Mushroom Dome™**

Ideal for every PC owner, FP's **PC Compatible Reishi Mushroom Dome™** is a user-friendly biological device providing the quintessential interface between human and computer. Its mesmerizing transformations grant the weary PC user the critical focal point for eye distraction and flights of fantasy. This desktop companion benefits from benign neglect, needing little or no maintenance. Living for up to a year, the PC Compatible Reishi Mushroom Dome should be on every computer desktop in America!

(Quantity discounts available to computer companies.).

**KRMD**(5 lbs.).....\$ 20.00

Shipping - \$4.75



#### **The Children's Mushroom Garden™**

Our kids love mushrooms and have always been fascinated by their growth. We thought it would be wonderful if other families could share in this experience. So we are introducing a uniquely delightful series of kits: **The Children's Mushroom Gardens™**. Housed in a reusable, clear domed cylinder, your child can watch mushrooms burst to life before their eyes. Each kit comes with an instruction booklet and an interactive designed watering calendar. (Note even if your child does not water this kit, it will still produce.) As with all of our mushroom kits, this one is also fully guaranteed. And, of course, the mushrooms are edible and choice!

#### **The Children's Mushroom Garden™**

**(Enokitake: *Flammulina velutipes*)**

**KCMG**(5 lbs.).....\$ 19.00

Shipping - \$4.75



**Fungi Perfecti is Certified Organic by Washington State Dept. of Agriculture Organic Food Certification Program**



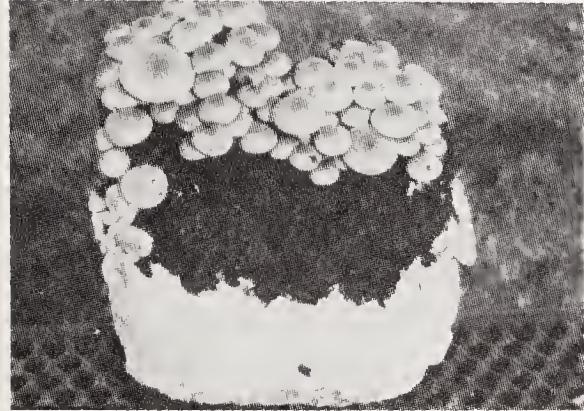
## The Shiitake Mushroom Patch

A mushroom treasured by many, our **Shiitake Patch** is composed of a unique blend of sterilized, enriched sawdust fully colonized by a select Chinese strain. Esteemed for both its health stimulating properties and its culinary value, our new Shiitake kit out-produces by far that of any known competitor. Shiitake mushrooms can be harvested at two week intervals up to 8 weeks. A 55-75 degrees F. environment is ideal.



### The Shiitake Mushroom Patch (*Lentinus edodes*)

**K-100** (8 lbs.) ..... \$ 20.00  
Shipping - \$4.75



resume. To activate this kit, a moist soil (provided) is placed upon it. In 2 weeks, mushrooms appear. Typically, two to three crops of mushrooms are produced, with a total yield of two pounds. (Cannot be shipped to Hawaii or internationally.)

### The Nameko Mushroom Patch (*Pholiota nameko*)

**K-150** (7 lbs.) ..... \$ 20.00  
Shipping - \$4.75

## The Pearl Oyster Mushroom Patch

Bouquets of Pearl Oyster Mushrooms will flourish within 2 weeks of arrival. A 55-75 degrees F. environment is needed. This kit produces a surprisingly abundant crop of tasteful mushrooms. We recommend inoculating your garden compost pile with this kit after use. Often gardeners can enjoy continued harvests of oyster mushrooms outdoors in the following months. (Please note that freezing is not harmful to this kit.)



### The Pearl Oyster Mushroom Patch (*Pleurotus ostreatus*)

**K-200** (8 lbs.) ..... \$ 15.00  
Shipping - \$5.25



## The Golden Oyster Mushroom Patch

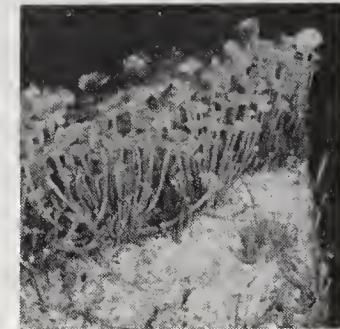
Bouquets of Golden Oyster Mushrooms will emerge within 2 weeks. A sustained 65-75 degrees F. environment is needed. Native to China and esteemed for its nutty flavor, we are the only ones in this country, perhaps the world, offering this uniquely flavorful mushroom to the home grower. (Note: this mushroom kit is not generally available between November and March. Please call during those months before ordering)

### The Golden Oyster Mushroom Patch (*Pleurotus citrinopileatus*)

**K-225** (8 lbs.) ..... \$ 19.00  
Shipping - \$5.25

## The Enokitake Mushroom Patch

A veritable forest of small capped, long stemmed Enokitake mushrooms -often too numerous to count - will emerge from this mushroom kit. Long favored by the Japanese and known by North Americans as The Winter Mushroom, this species is delightful to grow and eat. A 40-60 degree F. environment is recommended. (To activate, simply place it in your refrigerator.) Like the Pearl Oyster Mushroom Patch freezing does not harm this mushroom.



### The Enokitake Mushroom Patch (*Flammulina velutipes*)

**K-250** (5 lbs.) ..... \$ 20.00  
Shipping - \$4.75

## The Lion's Mane Mushroom Patch



An extraordinary mushroom, the Lion's Mane (***Hericium erinaceus***) produces cascading, icicle-like clusters which enlarge to the size of baseballs. Edible and choice, this mushroom is quickly gaining in popularity to all who discover it. To us, this mushroom imparts a "lobster-egg roll" flavor when cooked with butter and onions.

**The Lion's Mane Mushroom Patch (*Hericium erinaceus*)** (6 lbs.) **K-255** ..... \$ 25.00  
Shipping - \$5.00

## My Pet Reishi: The Mushroom Dream Garden

The ultimate gift for the mycophile in your life! We've cultivated ***Ganoderma lucidum***, the renowned Reishi in a 2 1/2 gallon vintage mason jar. This self contained mushroom garden, needs little or no attention. Just set it on a desk or shelf, and watch it undergo spell-binding transformations as finger-like mushrooms emerge from a sea of white mycelium. This mushroom kit can grow for a year or more before expiring. As the mushrooms mature, they are used to make a flavorful & healthful tea. Perfect for the upscale urban mycophile who has a penchant for the bizarre.

**K-265** (12 lbs.) ..... \$ 49.95  
Shipping - \$7.50

## IV. FRESH & DRIED MUSHROOMS

### Organically Grown Dried Shiitake Mushrooms

We sell dried shiitake mushrooms, organically grown by us, the folks at Fungi Perfecti. They are slow cured via our unique low temperature process.

**1 lb. Bag of FP's Dried Shiitake DM/LE/LB** (1lb.) ..... \$39.00

### Fresh Shiitake Mushrooms

25 lb. units of fresh, organically grown Shiitake are available from us.  
**FM/LE/LB** (25 lbs.) ..... Call for details

### Dried Reishi (Ling Zhi) Mushrooms

Heralded in the Orient for their health stimulating properties, ***Ganoderma lucidum*** is rapidly gaining in popularity. We cultivate this mushroom and offer one pound packages. 5 grams of Ling Zhi is recommended per liter of water for making a rich and soothing tea.

**1 lb. Reishi (Ling Zhi) DM/GL/LB** ..... \$89.00

## V. OUTDOOR MUSHROOM SPAWN & ACCESSORIES

### Backyard Mushroom Patches (Wood Chip Spawn)

Our outdoor mushroom patches are for beginners, gardeners, and all those who want a mushroom patch close to their home. FP provides a wide selection of mushroom spawn for planting outdoors. With our outdoor spawn, a mushroom patch can be established in the privacy of your backyard or garden. Taking only minutes to prepare, mushroom lovers can enjoy harvests for months and in some cases for years to come.

Example of one method for mound culture.



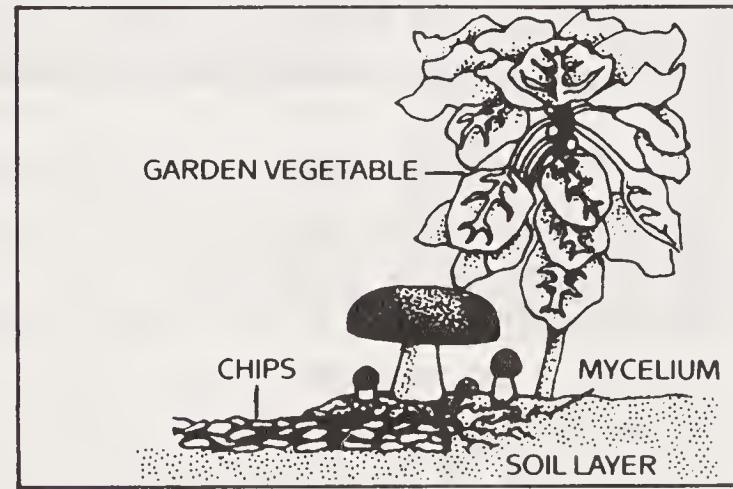
Layer of recommended moist mulch placed along edge of garden bed.



Sprinkling spawn on top of mulch layer.



Adding more moist mulch over the spawn layer.



Cross section of garden bed showing mycelium spread and mushroom growth.

## The King Stropharia Mushroom Patch

Giant burgundy colored mushrooms will emerge in your backyard. This is a low maintenance mushroom that is extremely forgiving to the actions of amateurs. Once inoculated, the mycological gardener leaves it undisturbed for 4-12 months. After this spawn running period, **The King Stropharia Mushroom Patch** is then capable of producing continuous flushes of mushrooms through an amazingly broad temperature window - from as low as 40 degrees F to as high as 90 degrees F. Flushes span 6 months to 2 years depending on care, location, and mass of colonized material. Noted for their monolithic size, our largest specimens have weighed nearly 5 lbs. apiece. They are delicious when cut like steaks and barbequed and basted with teriyaki on a grill. Perfect for vegetarians. (Warning: The King Stropharia has been known to stop cars, wreaking pandemonium throughout the suburbs of America. With your active participation, *your neighborhood could be next.*)



## The King Stropharia Mushroom Patch

**(*Stropharia rugoso-annulata*) K-270** (5.0 lbs) ..... \$ 20.00  
Shipping - \$4.50



## The Giant Morel Mushroom Patch

Cloned from some of the largest morels ever found, we provide pure culture spawn on this most popular of spring mushrooms. A mushroom bed is prepared outdoors and with some luck, time, and favorable spring weather, a secret morel patch can be protected within the privacy of your backyard. Inoculations should occur between May and January for crops to appear in the following spring.

**The Giant Morel Mushroom Patch (*Morchella angusticeps* complex)**  
**K-275** (5.0 lbs) ..... \$ 29.00  
Shipping - \$4.50

## Stump & Log Mushrooms (Plug Spawn)

We are offering plug spawn of six **easy-to-recognize** gourmet mushroom species. These sterilized birch plugs are spirally grooved and fully colonized by pure mushroom mycelium. For those interested in growing mushrooms on stumps, we recommend using 30-60 plugs per stump. Simply drill a 1 1/2-2 inch hole with a 5/16 inch drill bit into each stump, insert a dowel, and whack with a hammer. Stumps less than a year old are recommended and those in partial shade are better candidates than those with full exposure to sun. (Older stumps can be inoculated. However, the probability of success is lessened.) Once inoculated, the stumps will



begin to decompose, and mushrooms usually form in 12-36 months, appearing for several years thereafter.

Three quantities are offered.

100 plugs (.5 lbs).....	\$ 9.95
300 plugs (1.5 lbs).....	\$ 19.95

### **The Elfin Community Pack**

Buy any 3 Species (300 plugs ea.) of your choice.....	\$ 49.95
Buy any 3 Species (100 plugs ea.) of your choice.....	\$ 24.95

### **The Reishi/Ling Chi Mushroom**

This is perhaps one of the most aggressive species in our collection, quickly assaulting both conifer and hardwood stumps. Producing a conk-like mushroom, similar to the famed Artist Conk, but with a smooth, polished surface, deep reddish brown in color on top and with a white pored underlayer. Used in teas, it imparts a subdued, non-narcotic peaceful feeling to those who ingest it. Heralded by Chinese and Japanese for its health stimulating properties, this mushroom sells for more than \$80/pound when you can find it.

<b>Reishi PSGL-100</b> (.5 lbs).....	\$ 9.95
<b>Reishi PSGL-300</b> (1.5 lbs).....	\$ 19.95

### **Hen of the Woods**

#### ***Grifola frondosa (Polyporus frondosus)***

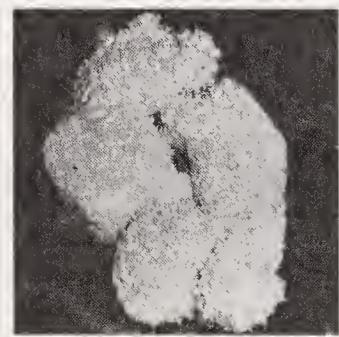
Hen-of-the-woods is one of the most popular of woodland mushrooms, well known to mushrooms lovers of Eastern North America. Preferring hardwood stumps, clusters of *Grifola frondosa* have been recorded in excess of 100 lbs.

<b>PSGF-100 plugs</b> (.5 lbs).....	\$ 9.95
<b>PSGF-300 plugs</b> (.5 lbs).....	\$ 19.95

### **The Lion's Mane Mushroom**

***Hericium erinaceus*** is a sister species to ***Hericium abietis***, differing primarily in its preference for hardwoods. This species particularly loves oaks and maples. Stumps or partially buried logs are recommended sites for its cultivation.

<b>Coral PSHE-100</b> (.5 lbs).....	\$ 9.95
<b>Coral PSHE-300</b> (1.5 lbs).....	\$ 19.95



### **The Tree Oyster Mushroom**

#### ***Pleurotus ostreatus***

Oyster mushrooms have been long been a favorite of many, commonly collected on logs and stumps. Probably the easiest to grow of the mushroom species we offer, this mushroom thrives on hardwoods throughout North America.

<b>PSPO-100 plugs</b> (.5 lbs).....	\$ 9.95
<b>PSPO-300 plugs</b> (1.5 lbs).....	\$ 19.95

## Chicken of the Woods

**Polyporus sulphureus** inhabits a wide variety of hardwoods and softwoods throughout North America. Perhaps the most vigorous strain in our culture collection, the mycelium is distinctly orangish in color. Partially buried logs and stumps can be inoculated with this species. This brilliant, shelf-like mushroom has the flavor of white chicken meat and is considered a favorite edible among many mycophiles. (Note: We do not recommend inoculating eucalyptus or aromatic woods.)



**Chicken PSPS-100 (.5 lbs).....\$ 9.95**  
**Chicken PSPS-300 (1.5 lbs).....\$ 19.95**

(For Shiitake plug spawn see page 20)

## Lawn Mushrooms

We are introducing two delightful species for launching into your lawn. Well watered lawns are an ideal locations for many mushrooms and these two species readily adapt to this uniquely suburban habitat. We see the occurrence of mushrooms in lawns as a wonderful phenomenon that should be encouraged. Hopefully, you will too.

### The Shaggy Mane

Shaggy Manes (**Coprinus comatus**) are delicious and are widespread throughout the northern hemisphere. Favoring rich soils, especially newly created lawns, this mushroom occurs in both the spring and the fall.

**Shaggy Mane Inoculum SPCC (5 lbs).....\$ 20.00**

### The Fairy Ring Mushroom

The classic Fairy Ring Mushroom (**Marasmius oreades**) being a long time favorite of many for their cashewesque flavor and their ready ability to dry true to form. This petite mushroom grows well in watered yards, its distinctive rings enlarging concentrically with time. All you do is plant our spawn into a 4 inch wide and 4 inch deep hole in your yard, and sow with the grass seed we provide. In as soon as 3 months, you'll notice dark green rings forming in your yard at the site of inoculation, a sure sign mushrooms are soon to appear.

**Fairy Ring Spawn SPMO (5 lbs)..... CALL**

## Habitat Components/Accessories for Outdoor Cultivation

### MycoMedia: Select Hardwood Chips

These fresh, paper grade alder chips, roughly 7/8" in length are ideal for the bed culture of many mushroom species, including the **King Stropharia (Stropharia rugoso-annulata)** and all the wood-loving species described with **The Mushroom Cultivator** by Paul Stamets and Jeff Chilton. We recommend composing a habitat whereby these chips represent 25% of the total mass. (Sawdust should comprise the remainder but not that of cedar, redwood, pines, or eucalyptus.)



**10 lbs per unit. MM-10 (10 lbs).....\$ 12.95**

## Morel Mushroom Media Matrix

We compose a complex mixture of the ingredients stimulatory to Morel growth. Containing peat moss, calcium sulfate, sawdust, and other ingredients, each 10 lb. box should amply provide the necessary base for growing morels when inoculated with our **Giant Morel Mushroom Patch** (see pg. 13). Once inoculated, this mix must be located outside and have contact with garden soils for the best results. 10 lbs per unit.  
**MM-20** (10 lbs)..... \$ 16.95

## Granular Gypsum

This superior pellet size gypsum is ideal for loosening composite substrates and is essential for the cultivation of Morels. This grade of gypsum is 90% pure calcium sulfate and has less than 1% magnesium. Essentially a pH neutral salt, calcium sulfate has a wide number of applications throughout all phases of the mushroom cultivation industry.

**GG-40** (40 lbs)..... \$ 12.00

## Accessories for Outdoor Cultivation

Here are several products that are helpful for ensuring success in outdoor cultivation:

### Nozzles

We have many more nozzles available than just those listed here. If you have a specialized application and need a unique nozzle- such as high pressure or stainless steel - please call us and we will be happy to service you. (For humidification systems, please refer to page 57.)

### Fine Mist Nozzles

Emitting a fine mist with a spray angle of 80 degrees and at the remarkably controlled rate of only .63 gallons/hr. at 40 psi and 1.4 gallons/hr. at 200 psi, these brass nozzles are easy to install and replace. Each has a fine mesh screen to prevent clogging. 3/8" male NPT.

**MLN-500** (.10 lbs)..... \$ 6.50 ea.  
**10 or more**..... \$ 5.50 ea.



### Soaking Nozzles

Dispersing 33 gallons at 25 psi in a 360 degree circle, this male threaded 1/8" nozzle is ideal for the controlled soaking of Shiitake logs and outdoor beds.

**MLN-550** (.10 lbs)..... \$ 7.50 ea.  
**10 or more**..... \$ 6.50 ea.

**Phone: 206-426-9292**      **Fax: 206-426-9377**

## VI. CONSULTATION SERVICES

### Technology Transfer/Design/Strain Selection/Personnel Training

For those embarking on mushroom cultivation as a commercial enterprise, our consultation services can be invaluable. Avoid the possible pitfalls and miscalculations plaguing start-up companies by employing our **Consultation Services**. Personally directed by Paul Stamets, co-author of **The Mushroom Cultivator**, we can assist in designing state-of-the-art cultivation facilities. Our select strains are offered, by license only, to key individuals and companies in each geographical/marketing region. (These strains are from our private reserve and are not listed elsewhere in this catalogue.) We can even train your personnel at our facility. Our multifaceted talents and depth of experiences establishing gourmet mushroom farms around the world can greatly benefit any new start-up company. Our fees are reasonable. Each application is considered on an individual, confidential basis.

### Production Systems for Select Mushroom Strains

**I. Shiitakes** We have developed a revolutionary, rapid cycle method for the indoor cultivation of Shiitake. Our system results in first harvests of Shiitake in 30-40 days from inoculation onto sterilized, enriched sawdust/bran. Yields range from 25-50% of substrate mass. This system utilizes the combination of a **unique strain/substrate matrix/initiation strategy** to accelerate the Shiitake production cycle months ahead of any other method.

**II. Oysters** Isolated from the wild, our private **Strain Library** boasts several strains whose speed of growth, quality of fruitbody, and market acceptance surpasses that of most any being grown currently by would-be competitors. Flushes can commence as soon as 15 days after inoculation onto straw. Cultivation in plastic or netted columns allows for easy material handling and cropping. Since oyster mushrooms are more fragile than most other commercially grown mushrooms, reducing their shelf-life, there are excellent opportunities for local producers to capture market share from out-of-state producers.

**III. Enokitakes** After years of isolations we have developed a new strain of Enokitake (***Flammulina velutipes***) whose performance compares favorably with any from the Orient. Isolated from mountains of Colorado, this strain produces prolifically between 50-70 degrees F. An excellent edible, with uniquely beneficial medicinal properties, this species is worthy of consideration by North American entrepreneurs.

**IV. King Stropharias F.P.** has long been a pioneer in the promotion of ***Stropharia rugoso-annulata*** on waste wood debris. With increasing emphasis on composting and recycling in urban and rural communities, we encourage everyone to consider this species for its remarkable ability to break down wood wastes. In the course of growing this giant edible, the wood debris is reduced to rich soil. A wonderful species for neighborhood recycling/gardening projects, this adaptive species has potential for being grown throughout North America.

**V. Others:** Our expertise is not restricted to just the aforementioned species. There are many other species to consider (such as **Morchella spp.** (Morels), **Hericium spp.** (Lion's Mane), and other **Fungi Exotica**) depending upon your level of knowledge, location, materials, and markets. If you have a project in mind, let us help you. Just call or write. You may be surprised by our resourcefulness.



Paul Stamets, mycological visionary of Fungi Perfecti, stands in front of growing rooms



Phone: 206-426-9292      Fax: 206-426-9377

## VII. THE STAMETS MUSHROOM SEMINARS

We conduct in-depth workshops in mushroom cultivation, emphasizing a hands-on approach at our gourmet mushroom research station. Participants learn tissue culture, spawn generation techniques, substrate preparation, inoculation techniques, and strategies for maximizing yields. Each participant receives 5 select mushroom strains for their own unrestricted use. (The cultures alone have a value in excess of \$ 300.) The cultivation of Shiitake, Oyster, Enokitake, King Stropharia, Reishi and Morels are covered in detail. Space is limited, registration is on a first come basis. Food and lodging are not included. Required textbook: **The Mushroom Cultivator** by Paul Stamets and Jeff Chilton. These informationally intense courses are taught personally by Paul Stamets. Further information will be sent upon registering. Since space is limited, early registration is strongly advised. Three basic and one advanced sessions are conducted each year.

**The Stamets Workshops:      Registration: \$ 300.00**

**Spring Session:**

The first weekend in May

**Fall Session:**

The second weekend in September

**Summer Session:**

The third weekend of July

**Winter Session:**

The second weekend of December

**The Stamets Master's Course:** An annual event reserved only for those who have attended one of the aforementioned previous sessions, this weekend event delves into the finer subtleties of mushroom culture. Formula and Strategy oriented, each participant receives 20 cultures for their own unrestricted use. This course is limited to 20 cultivators.

**Stamets Master's Course:      Registration: \$ 500.00**

**Two Annual Sessions:**

The last weekend of September  
The second weekend in June

Paul Stamets is available for instructing educational seminars anywhere in the world. Please plan well in advance. You can call, write or Fax him c/o **Fungi Perfecti**.



**Fungi Perfecti is Certified Organic by Washington State  
Dept. of Agriculture Organic Food Certification Program**



**Phone: 206-426-9292      Fax: 206-426-9377**

## VIII. Ready to Inoculate **PURE CULTURE SPAWN**

Ready-to-inoculate spawn is offered for five species. We maintain stock of these species for use as inoculum into bulk substrates. Please allow 4 weeks for delivery unless otherwise notified. We do our very best to insure that quality spawn is produced. We can not, however, be responsible for the condition of spawn once shipped. We prefer to ship via **UPS 2nd Day Air** or via **FED-EX**. If the spawn arrives defective, it will be replaced at no charge *provided we are notified within 48 hours of delivery* and the defective spawn is returned. Since we cannot control the methods by which this spawn is used, no promises or claims about yields are made. (There are simply too many factors.) This spawn is being offered as a service. *We encourage all commercial cultivators to develop the sterile culture skills to create their own spawn.* Promoting sterile culture is our business. (See pg. 19 for our popular workshops revealing spawn generation techniques.)

MUSHROOM	FORM OF	UNIT SIZE/GROSS WT.	COST
<b><i>Lentinus edodes</i></b> (Shiitake)	Grain master 600 Sterilized plugs	<b>S-10</b> (4 lbs.) ..... <b>S-50</b> (2 lbs.).....	<b>\$29.00</b> <b>\$16.00</b>
		Sterilized Sawdust <b>S-20</b> (1 gallon/5 lbs)..... (sufficient for 30-50 logs)	<b>\$16.00</b>
		(See page 34 for palm inoculator)	
<b><i>Pleurotus ostreatus</i></b> (Oyster)	Sterilized grain Sterilized sawdust	<b>S-15</b> (1/2 gallon/2.5 lbs) ..... <b>S-250</b> (1 gallon/5 lbs).....	<b>\$ 25.00</b> <b>\$ 12.00</b>
<b><i>Stropharia rugoso-annulata</i></b> (The King <b><i>Stropharia</i></b> )	Sterilized Woodchips	<b>S-300</b> (1 gallon/4 lbs).....	<b>\$ 20.00</b>
<b><i>Morchella esculenta</i></b> (True Morel)	Sterilized Grain	<b>S-400</b> (1/2 gallon/4 lbs.).....	<b>\$ 25.00</b>
<b><i>Morchella angusticeps</i></b> (Black Morel)	Sterilized Grain	<b>S-450</b> (1/2 gallon/4 lbs.).....	<b>\$25.00</b>

### **Custom Requests :**

**We can custom generate spawn of a species or strain of your choice. Please call for specific arrangements and pricing.**

**Note:** Sawdust and plug spawn comes in a sterile airflow bag. (See page 30) Grain spawn can come to you either in a sterile airflow bag or in its original glass, mason jar complete with autoclavable lid and filter disc. We recommend the latter for those using this spawn for expansion into sterilized substrates. If you desire spawn in the original, sealed jar with filter disc/lid, please add **\$ 2.00** per unit. Quantity discounts available for orders exceeding 20 units.)

## IX. Live Mushroom Cultures in Test Tube Slants

### A Select Library of *In Vitro* Strains

The strains represented here are unique. Some are rare, not being available from culture libraries of North America, and potentially high yielding. We are constantly working with these strains, screening and maintaining cell lines. **Fungi Perfecti** is releasing the following strains for use on a conditional basis.

By purchasing these cultures, the customer agrees to the following terms. The purchaser consents to use these strains for private use and not to generate spawn from them for resale unless by contractual agreement with **F.P.** Violators are subject to prosecution. The purchaser further agrees that mini-trials will be conducted prior to use in any commercial enterprise to assess their efficacy. The purchaser can not and will not represent nor sell our strains in any form. Once shipped **Fungi Perfecti** can not be responsible for the condition of any cultures. **Fungi Perfecti** will replace culture if defective or should you lose it within one year of purchase at no additional charge.

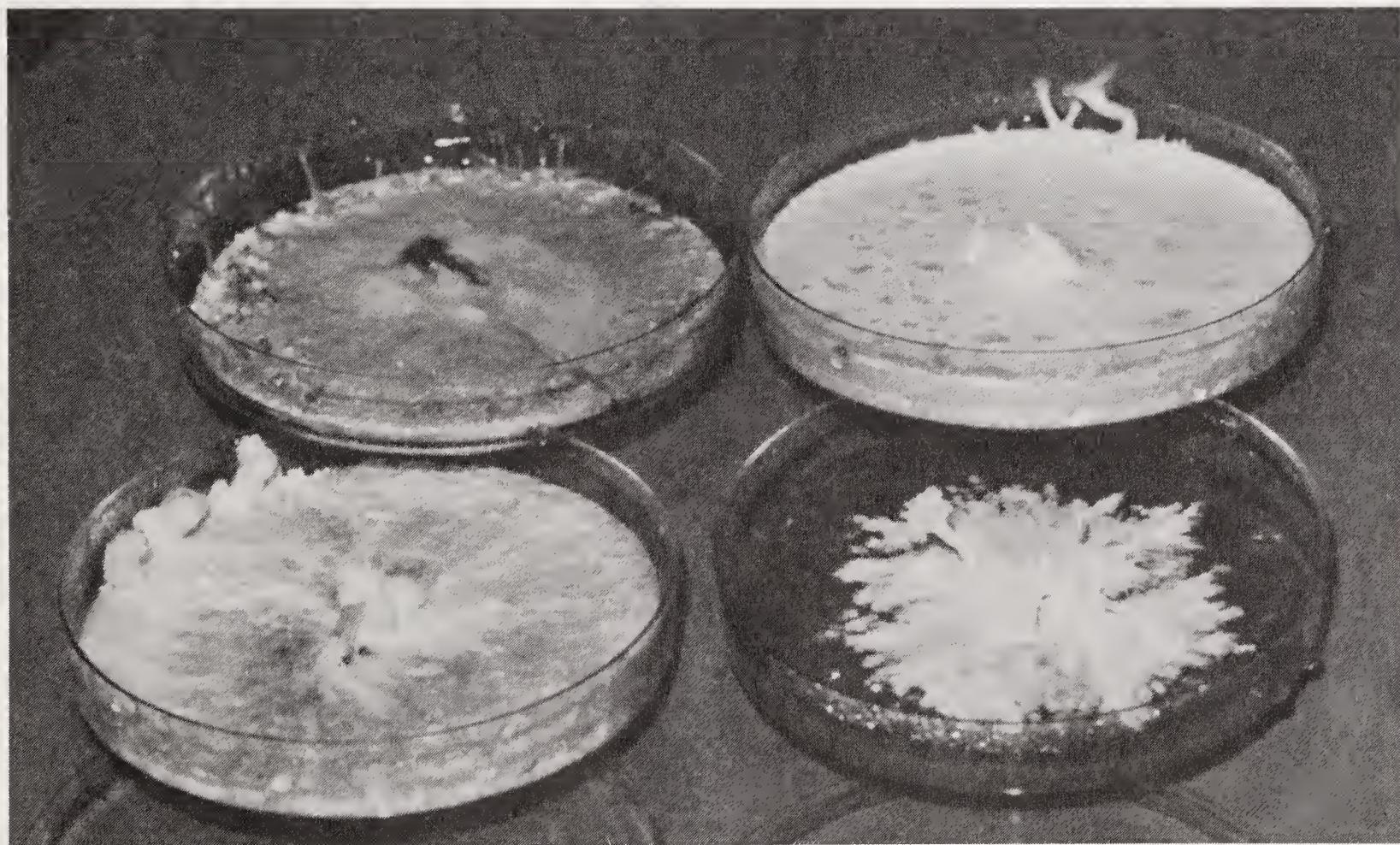
Each strain is designated with the **Stamets "P-value"** scale, signifying the expansion of mycelium covering a 100 x 15 mm. petri dish (approximately 1,000-2,000 cell divisions). The first time a wild species is tissue cultured, the age is denoted as **P-O**. Thereafter each successive growth over the petri dish's surface is described in increments of **P-1**, etc.... This library tries to maintain strains closest to their wild origins or closest to their peak fruiting potentials. Each culture comes in a 125 x 20 mm. glass test tube. (For a more expanded list, including proprietary strains developed by Paul Stamets, send \$ 1.00 and a self addressed stamped envelope to: **The Stamets Culture Library, Fungi Perfecti, PO BOX 7634, Olympia, Wa. 98507.**)

GENUS & SPECIES	COMMON NAME	FRUITING TEMP. RANGE	PRICE
<i>Agaricus brunnescens</i>	"White Button" <b>C-100</b>	60*-70*F.....	\$39.00
<i>Agaricus ("portobello")</i>	"The Italian <b>Agaricus</b> " <b>C-120</b>	60*-70*F.....	\$49.00
<i>Agaricus sylvicola</i>	"The Woodland <b>Agaricus</b> " <b>C-125</b>	50*-70*F.....	\$49.00
<i>Agrocybe aegerita</i>	"Brown Swordbelt" <b>C-130</b>	50*-60*F.....	\$39.00
<i>Coprinus comatus</i>	"Shaggy Mane" <b>C-160</b>	45*-65*F.....	\$39.00
<i>Flammulina velutipes</i>	"Enokitake" <b>C-170</b>	40*-50*F.....	\$39.00
<i>Ganoderma oregonensis</i>	"Ore. Ling Chi" <b>C-180</b>	50*-60*F.....	\$39.00
<i>Ganoderma lucidum</i>	"Ling Chih" <b>C-190</b>	50*-60*F.....	\$39.00
<i>Grifola frondosa</i> ( <i>Polyporus frondosus</i> )			
	"Hen of the Woods" <b>C-200</b>	50*-60*F.....	\$49.00
<i>Lentinus edodes</i>	"Shiitake"		
U-8	"Summer Strain" <b>C-220</b>	60*-75*F.....	\$39.00
WG	"Winter Giant" <b>C-225</b>	50*-65*F.....	\$39.00
W-4	"Alder Strain" <b>C-237</b>	55*-70*F.....	\$39.00
<i>Lepiota rachodes</i>	"Scaly <b>Lepiota</b> " <b>C-250</b>	50*-65*F.....	\$59.00
<i>Lepista nuda</i>	"The Wood Blewit" <b>C-260</b>	55*-65*F.....	\$39.00
<i>Lyophyllum</i> sp.	"Shimagi" <b>C-270</b>	45*-60*F.....	\$49.00
	"Fried Chicken Mushroom"		

<b><i>Marasmius oreades</i></b>	The Fairy Ring Mushroom <b>C-275</b>	50*-60°F.....\$49.00
<b><i>Morchella esculenta</i></b>	The Morel <b>C-280</b>	35*-50°F.....\$49.00
<b><i>Morchella angusticeps</i></b>	The Black Morel <b>C-285</b>	35*-50°F.....\$49.00
<b><i>Pholiota nameko</i></b>	Nameko Mushroom <b>C-290</b>	50*-65°F.....\$49.00
<b><i>Pleurotus columbinus</i></b>	The Blue Oyster <b>C-330</b>	60*-75°F.....\$49.00
<b><i>Pleurotus eryngii</i></b>	The King Oyster <b>C-335</b>	55*-65°F.....\$49.00
<b><i>Pleurotus ostreatus</i></b>	The Oyster <b>C-350</b>	50*-65°F.....\$49.00
<b><i>Pleurotus sajor-caju</i></b>	The Phoenix Oyster <b>C-360</b>	65*-75°F.....\$49.00
<b><i>Volvariella volvacea</i></b>	The Paddy Straw <b>C-370</b>	75*-85°F.....\$49.00

**Special Culture Offer:** Buy any 20 species or varieties for \$ 500.00.

**New Strain Subscription Service:** We will send you 5 new fruiting strains of gourmet mushrooms, recently isolated from the wild, for an annual, renewable subscription fee of \$ 150.00. We aggressively seek out new candidates for domestication throughout the year. You can benefit from our skills through the use of this service. (Species are not limited to just those mentioned above.)

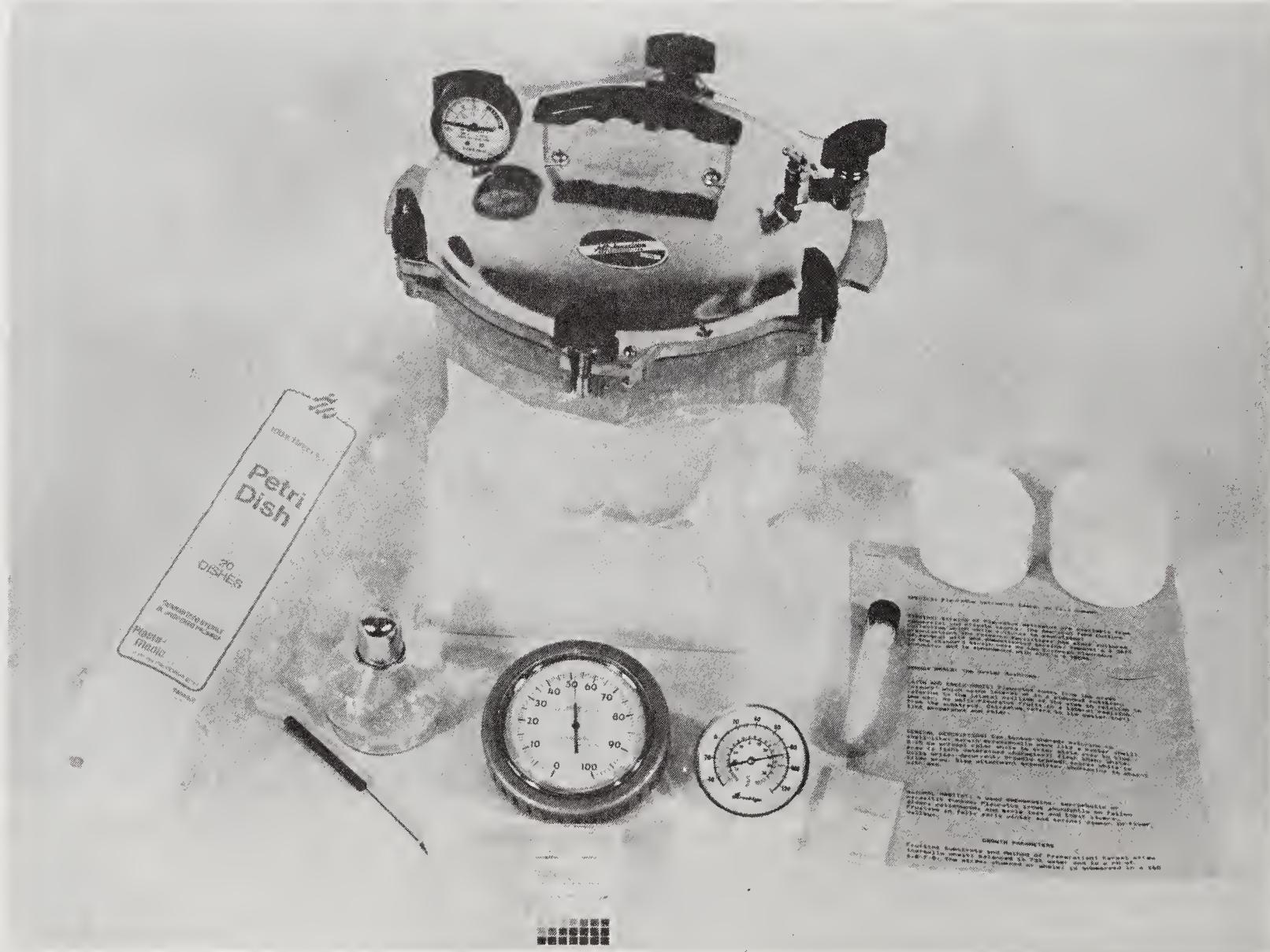


## X. LABORATORY EQUIPMENT & SUPPLIES

### The Complete Sterile Culture Mushroom Kit

We've assembled several high quality mushroom equipment packages that include the items most essential to starting cultures and creating spawn. With these kits you get all the equipment required versatile equipment that you can use and reuse for years to come. As a helpful aid, we recommend the book, **THE MUSHROOM CULTIVATOR**, which should be ordered separately. Each kit includes the following ten items:

- 1) An option for a pressure cooker
- 2) Max-Min thermometer
- 3) Alcohol lamp
- 4) Hygrometer for measuring humidity
- 5) Sleeve of 20 petri dishes
- 6) Scalpel
- 7) 1/2 lb. of nutrient-enriched agar media
- 8) Box of colorphast pH indicator strips
- 9) 50 synthetic discs, for regular-mouth mason jars, to screen contaminants
- 10) Your choice of a culture of a vigorous ***Agaricus brunnescens*** (Button), ***Pleurotus ostreatus*** (Oyster) or ***Lentinus edodes*** (Shiitake) mycelium.



**A Basic Kit** with no pressure cooker (5 lbs)

**B Basic Kit** with the 21 1/2 qt. pressure cooker(27 lbs)

**C Basic Kit** with the 41 1/2 qt. pressure cooker(45 lbs)

<b>K-300.....</b>	<b>\$159</b>
<b>K-400.....</b>	<b>\$269</b>
<b>K-500.....</b>	<b>\$389</b>

## PREPARED MEDIA, MEDIA COMPONENTS, MEDIA ADDITIVES

### Malt Extract Agar (MEA)

Formulated especially for mycelium of the higher fungi to promote luxuriant growth. 40 grams is recommended per liter of water.

**M-100** (1/2 lb.) ..... \$16.00  
**M-110** (1 lb.) ..... \$29.00



### FP's Antibiotic Malt Extract Agar

**Media (AB/MEA)** We are introducing our own antibiotic media that

prevents bacterial growth while stimulating the growth of mushroom mycelium. For those who have experienced the disaster bacteria wreaks upon the spawn laboratory, this media is the solution. 40 grams is recommended per liter of water.

**M-205** (1/2 lb.) ..... \$28.00  
**M-230** (1 lb.) ..... \$49.00

**Agar Agar** A non-nutritive derivative of sea weed that dissolves into and solidifies water. Our agar is individually assayed and is far superior to agars bought in most health food stores. (15 grams is recommended per liter of water.)

**M-200** (.5 lb) ..... \$28.00  
**M-210** (1 lb) ..... \$54.00

**Peptone (100 grams)** Enhancing mycelial growth of most saprophytic fungi.

**M-400** (.5 lb) ..... \$16.00

### Rye Grain

Only experienced cultivators know the importance of grain quality to spawn production. We assure that our rye is the best available: few broken kernels; relatively free of extraneous debris; low in bacterial endospores; and recently harvested. Our rye is certified organic - free of any fungicides and/or pesticides. (Shipping costs are individually determined. See UPS rate charts. )

**M-600** (25 lbs.) ..... \$ 10.00  
**M-700** (50 lbs.) ..... \$ 18.00  
**M-800** (2000 lbs.) ..... \$ CALL



## Rice Bran

Our rice bran is the preferred supplement for boosting yields of Shiitake and Enoki-take. Composing 15-20% (dry mass) of the sawdust blend, this quality bran is a must for any Shiitake operation. (Note: All rice brans are not alike. Our is of proven quality.)

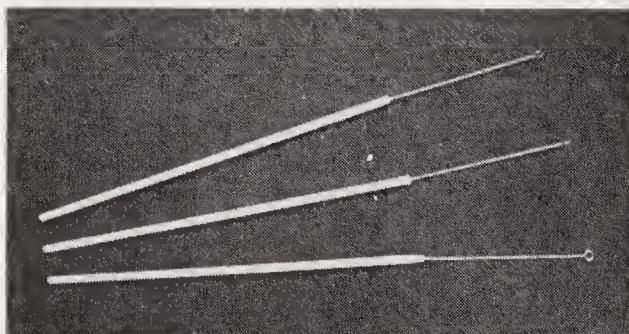
**M-750** (50 lbs.).....\$ 44.00  
**M-775** (500 lbs.).....\$ 395.00

## Uninoculated Shiitake Plugs (Dowels) for Spawn Producers.

Tapered birch dowels measuring 5/16" x 1". Each dowel has 4 spiral grooves, accelerating mycelial recovery from inoculation. 10,000 plugs per unit. To create spawn just soak for two days, sterilize, and inoculate with grain spawn. Each 1/2 gallon of grain spawn can inoculate 20 gallons of dowels or sawdust. (For already inoculated dowel spawn see page 20.)

**DOW-381** 10,000 dowels (16 lbs.).....\$139.00

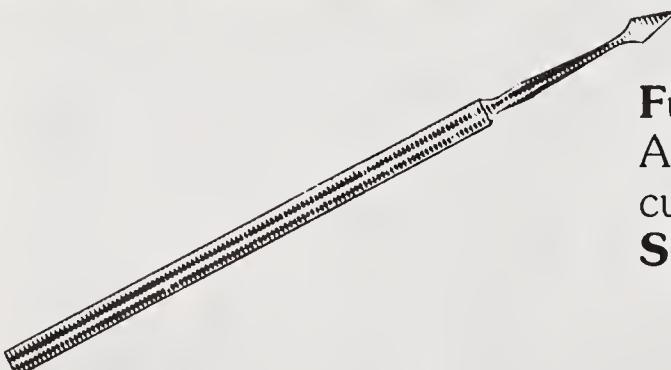
## SCALPELS



### Inoculation Loops

A standard inoculation loop with 6 in. handle and 2.75 in. wire & loop. Ideal for streaking spores across a petri dish.

**SC50** (.10 lbs.).....\$ 5.00



### Full Spear Scalpel

A full spear headed all metal scalpel perfect for cutting agar media.

**SC-200** (.10 lbs.).....\$ 8.00

### Professional Scalpel

Finally here is a device that can hold a loop or knife and one long enough to get into the far recesses of test tubes. This imported 8" stainless steel scalpel is ideal for tissue culture. (Can be inserted into 20 mm. diameter test tubes.) Highest quality. Complete with 10 disposable, snap-on knife blades.

**SC-300** (.25 lbs.) .....\$29.95

**SCB-10 Pack of 10 blades** (.10 lbs).....\$5.00



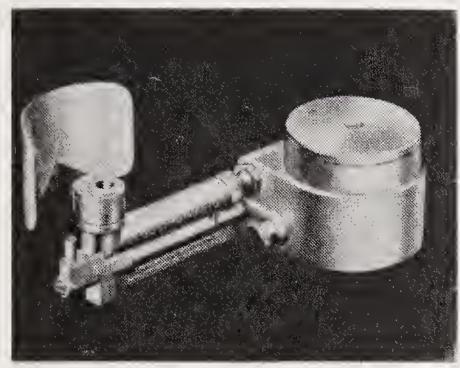
## SCALPEL STERILIZERS



**Alcohol Lamps** The standard laboratory alcohol lamp made of thick glass and with a cotton wick. **B-100** (.5 lb.) ..... \$9.00



**Standard Bunsen Burner** A solid metal bunsen burner for use with butane or propane gas. With flame stabilizer and adjustable orifice  
**B-250** (.75 lbs.) ..... \$16.95



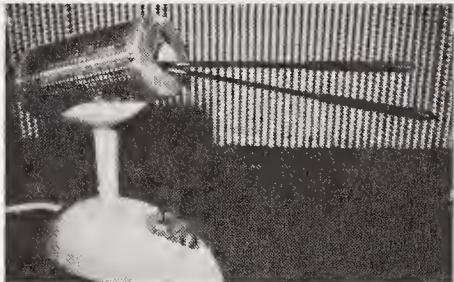
### Touch-O-Matic Bunsen Burner

Emitting a flame only when the platform is depressed, this unit can be fueled by a variety of gases, including propane, butane, natural or mixed. (Unless otherwise specified, each unit is fitted for propane.) The shield protects the flame so that the **Touch-O-Matic** can be placed directly in the airstream of a laminar flow hood.

**B-275** (5 lbs.) ..... \$129.95

**Bacti-Cinerator III Scalpel Sterilizer** A standard in tissue culture laboratories throughout the world, the B-111 instantly sterilizes the transfer tool for use. Great for speedy transfers by cultivators whose work load supersedes the limits of human endurance.

**B-111** (10 lbs.) ..... \$249.95



## PETRI DISHES & ACCESSORIES

Plastic and sterile. 100 x 15 mm. 20 dishes per sleeve.

**1-2 sleeves** (.75 lbs.ea.)  
**DP-100** ..... \$4.75 ea.  
**3-5 sleeves** ..... \$4.60 ea.  
**6-10 sleeves** ..... \$4.50 ea.  
 Cases of 500 Dishes (25 sleeves)  
**DP-500** (24 lbs) ..... \$74.00 ea.

Glass petri dishes. Autoclavable, reusable and long lasting.

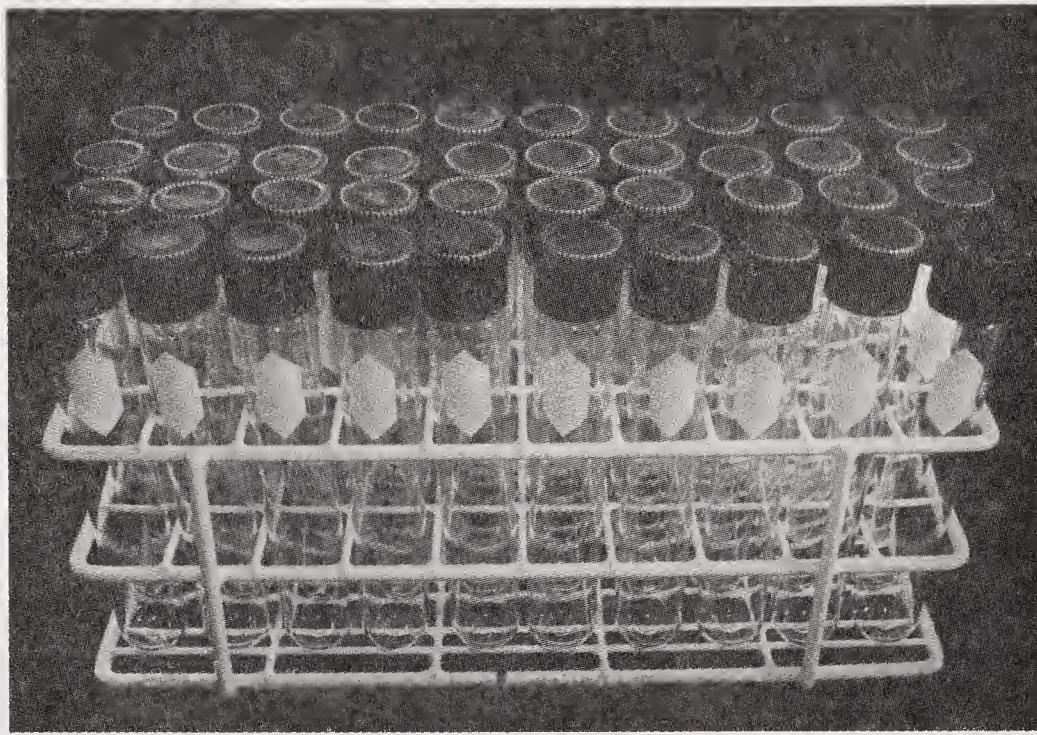
**1-11 Dishes** (.25 lbs.) **DG-100** .. \$3.50 ea.  
**12 or more** ..... \$3.00 ea.  
 Case of 72 ..... \$189.00 ea.



**Petri Dish Rack** Epoxy coated steel wire rack for holding plastic petri dishes. Top opening permits easy access and prevents dishes from slipping out.

**D-700** (1.5 lbs.) ..... \$ 34.95

## TEST TUBES & ACCESSORIES



**Test Tubes** Test tubes with autoclavable screw cap and white "window" for erasable inscriptions. Used primarily for the long term storage of pure cultures. High quality.

Standard 125 x 20 mm.

**TT-20** (.25 lb.)....\$29.00

Case of 48 (5 lbs.)..\$79.00

Masters 200 x 25 mm.

**TT-25** Set of 10

(1 lb.).....\$35.00

Case of 36 (5 lbs.)..\$95.00

Giants 200 x 38 mm. **TT-38** Individually (.25lb.).....\$8.00  
Case of 24 (8 lbs.).....\$159.00

### Test Tube Racks

High quality, rust proof racks for holding test tubes. Encased in heat- resistant epoxy. Facilitates autoclaving, solidifying and storing of cultures tubes. Holds 48 per rack.  
For 20 mm Test Tubes **TR-4020** (.75 lbs) ..... \$29.00  
For 25-30 mm. Test Tubes **TR-4030** (1 lb.).....\$35.00

### Test Tube Brush

A 9" long brush with 3" black china bristles for easy cleaning of test tubes  
**TB-93** (.10lbs.) ..... \$4.50

### Parafilm

An elastic wax -like film that can be stretched to seal petri dishes and test tubes. Very useful, measuring 2 inches by 250 feet. Many cultivators wrap individual culture dishes, once inoculated, to prevent the entry of contaminants along the periphery. We highly recommend this procedure for beginners and for anyone who frequently experiences airborne contamination.

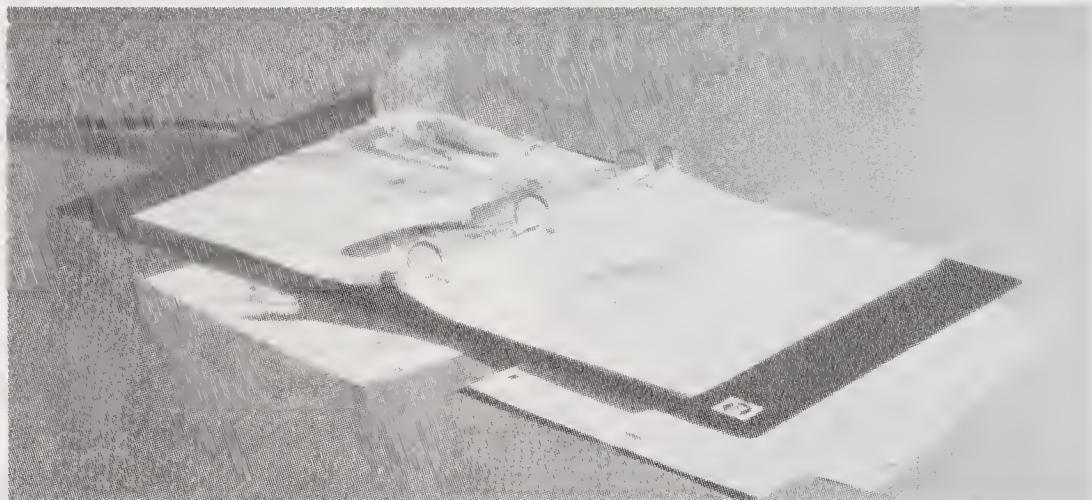
**PF-250** (2 lbs).....\$24.95

**Phone: 206-426-9292**      **Fax: 206-426-9377**

## Waterproof Paper

For notetaking in high humidity environments or in the rain, this polyethylene paper works well with ballpoint pen or lab marker. Excellent for on-site data recording amongst your indoor or outdoor mushroom experiments. Packs of 100 sheets

**WPN-100** (2 lbs.).....\$29.00



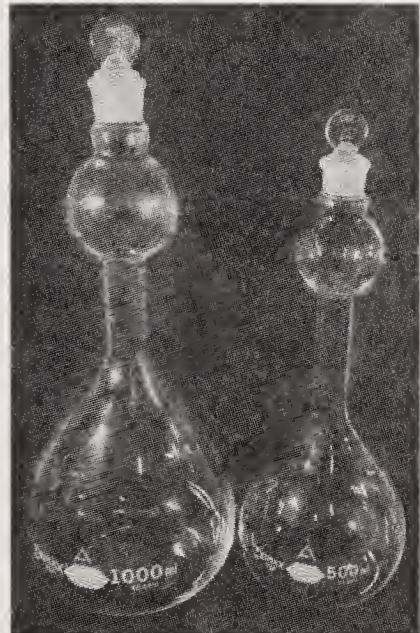
## MEDIA FLASKS & GRADUATED CYLINDERS, ETC...

### Autoclavable Plastic Flasks

Transparent straight-neck flasks made of unbreakable polymethylpentene.

**500 ml. AF-500** (.25lbs.).....\$16.95

**1000 ml. AF-1000** (1.25 lbs.).....\$24.95

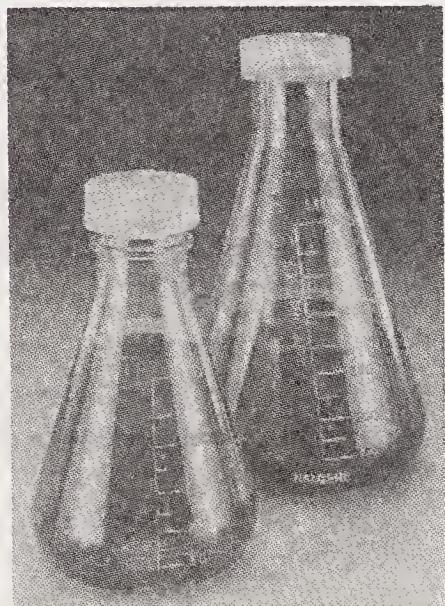


### The Pro-Flasks

Professional glass media pouring flasks with swelled bubble in neck to prevent over-spill.

**500 ml. PF-500** (.75 lb.) .....\$64.95

**1000 ml. PF-1000** (1.25 lbs.).....\$84.95



### Erlenmeyer Media Flasks

Clear, autoclavable, chemical resistant media flasks made of durable polymethylpentene and equipped with a screw-on closure.

**250 ml. EF-250** (.25 lbs) .....\$ 24.95

**500 ml. EF-500** (.35 lbs).....\$ 29.95

**1000 ml. EF-1000** (.50 lbs).....\$ 34.95

**Phone: 206-426-9292**      **Fax: 206-426-9377**



### Graduated Cylinders

Graduated cylinders are especially useful for insuring the accuracy of measurement "scoops" used in the repetitive making of spawn and for the accurate dispensing of liquids. Made of autoclavable polypropylene.

100 ml. with 1 ml. graduations	<b>GC-100</b>	(.25 lb).....	<b>\$12.50</b>
250 ml. with 5 ml. graduations	<b>GC-250</b>	(.50 lbs).....	<b>\$14.00</b>
500 ml. with 5 ml. graduations	<b>GC-500</b>	(.75 lb).....	<b>\$19.00</b>
1000 ml. with 10 ml. graduations	<b>GC-1000</b>	(1 lb).....	<b>\$29.00</b>

### Plastic Pipettes



Steam autoclavable, unbreakable polypropylene transfer pipettes.

<b>10 ml. PP-10</b>	(.10 lb) .....	<b>\$14.00</b>
<b>25 ml. PP-25</b>	(.10 lb).....	<b>\$ 21.00</b>

### Non-Absorbent Cotton

1 lb. roll of pure white medical grade non-absorbent cotton

<b>NAC-100</b>	(1 lb) .....	<b>\$24.95</b>
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### Wash Bottle

An essential item for any laboratory, this versatile wash bottle makes clean-up and dilutions easy.

<b>WB-100</b>	(.50 lb) .....	<b>\$4.00</b>
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### LIDS

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#### One Piece Metal Canning Lids

69 mm. diameter lids that fit securely on regular mouth Mason Jars. For all spawn makers who are fed up with handling two piece lids, these make inoculation an unawkward endeavor. We recommend drilling a 3/8" hole through the lid and inserting a filter disc underneath. (see page 40.)

Sets of 12 <b>LQM-69</b>	(1 lb.).....	<b>\$4.00</b>
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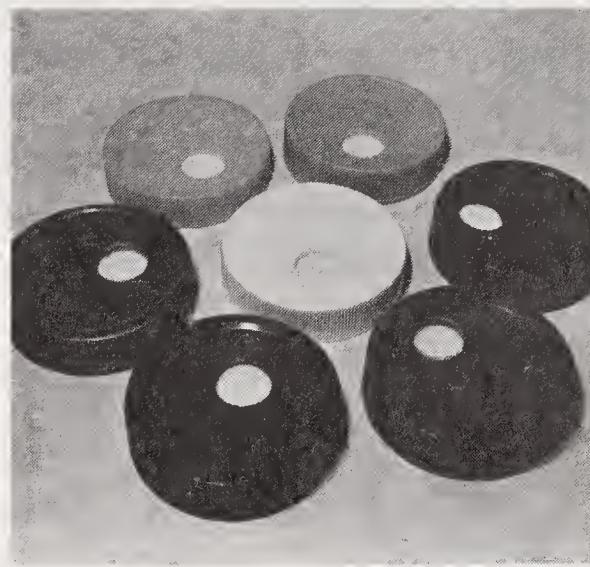
**Phone: 206-426-9292**

**Fax: 206-426-9377**

## Autoclavable Colored Plastic Lids

These 70 mm. diameter one piece lids are ideal for use in spawn production and are superior to metal canning lids. Available in an assortment of colors, enabling spawn producers to identify strains, species, and/or production runs at a glance. A 3/8" diameter hole should be drilled through each and a filter disc inserted underneath to allow contaminant-free air exchange. **Colors:** White, Black, Blue, Maroon, Green, Bright Yellow.

Sets of 10 **LQM-70/10** (2 lbs).....\$ 5.00  
 Case of 100 **LQM-70/100** (22 lbs).....\$ 49.00



## BAGS & JARS FOR INCUBATING SPAWN

### Spawn Bags with Filter Patch

An autoclavable, patented spawn incubation bag complete with a microporous filter patch that allows gas exchange but precludes the passage of contaminant spores. Measuring 17 1/2 x 8 1/4 x 4 3/4 inches. These bags are widely used by mushroom growers throughout the world.

**Set of 10 SAB-010** (1 lb) .....\$ 8.50  
**Set of 100 SAB-100** (7 lbs) .....\$ 75.00  
**Set of 800 SAB-800** (56 lbs) .....\$ 445.00  
**Set of 5000 SAB-5000** (340 lbs) .....\$ 1500.00

### Grain Incubation Spawn Bags

Specifically designed for the incubation of grain spawn, these autoclavable, 2.5 mil. bags are non-gussetted and allow air exchange through a circular 35 mm. diameter microporous filter patch. We recommend first generating grain spawn in these two dimensional bags and subsequently inoculating non-grain based bulk substrates in three dimensional bags (the SAB's).

**GISB-10 Set of 10** (.5 lbs.) .....\$ 7.50  
**GISB-100 Set of 100** (5 lbs.) .....\$ 55.00  
**GISB-800 Set of 800** (40 lbs) .....\$ 425.00

### Autoclavable Bags

Heat tolerant bags for sterilization of spawn media or other materials. Also excellent for bulk substrates such as chopped straw or sawdust. Sets of 10.

**12"x24" APB-1224 (.25 lb)** .....\$ 5.00  
**24"x30" APB-2430 (.50 lb)** .....\$ 10.00

### Non-Autoclavable Bags

A three dimensional, non-autoclavable bag. Measures 30"x12"x8". Great for growing out spawn on straw, woodchips, or other bulk substrates. Sets of 10.

**PB-3012 (.25 lb.)** .....\$ 4.00

**Impulse Sealer**

An excellent sealer well suited for use with sterile airflow spawn bags. Providing a 300 mm. long seal in 0.2-1.3 seconds, this sealer is helpful in the airtight sealing of the bags used in the manufacture of sawdust/bran blocks.



**IS-100** (12 lbs) ..... \$225.00

**Ultimate Spawn Containers: *The 2.5 Gallon Mason Jars***

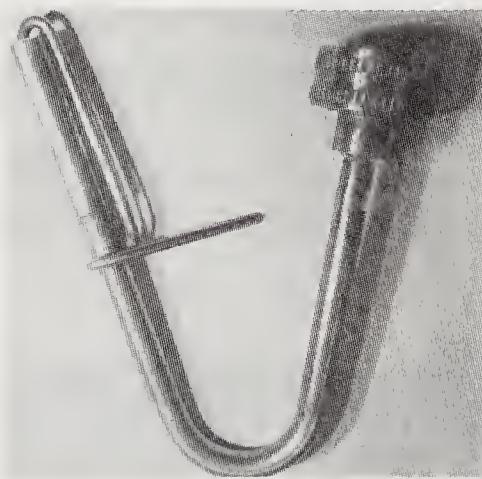
Often times spawn producers are limited by the size of the spawn container. They could expand their spawn by one more exponent if only there was a jar large enough. The **2 1/2** gallon mason jar is that logical final step in the spawn generation process. Autoclavable, durable, and complete with an autoclavable cap and microporous filter disc, each jar is equipped with a wooden handle. (Only one jar fits inside of a model 941 pressure cooker). Filter discs are \$.75 each and should be ordered separately.

**USC250** (6 lbs) ..... \$ 16.95  
Shipping - \$4.25

**The Ridiculously Large 4-Gallon Glass Mason Jar**

Well folks, this is the largest Mason jar we've encountered- 4 gallons! This could either be used as a miniature environment for growing mushrooms (a "mycoterrarium"), a piggy bank for your children's college education, or for those with an autoclave one heck of a spawn jar. Measuring 18 3/4 in. high with a 4 in. (125 mm.) diameter opening. 125 mm. filter discs (SFD125) should be ordered separately at \$.75 ea. Light blue tint.

**USC400** (8 lbs.) ..... \$ 29.95  
Shipping - \$7.25

**BOTTLE WASHERS****Inversed Bottle Washer**

This unit is another example that simplicity can be the genius of design. Attaching to a standard kitchen faucet, this all brass device features a pressure sensitive one way valve that is activated when a jar or bottle is brought up to it. Especially useful in the cleaning of test tubes or small spawn bottles. (Adapter fits onto faucet by removing the aerator.)

**IVB-100** (2 lbs) ..... \$ 12.95  
**Faucet Adapter IVB-101** (.5 lb) ..... \$ 2.50



### Submersible Bottle Washer

This submersible bottle washer is an essential device for all spawn makers. Its three replaceable brushes ensure speed and efficiency for any high volume laboratory, cleaning both the inside and outside of mason jars. Warrantied for 1 year. We highly recommend this unit.

**SBW-100** (20 lbs.) .....\$289.95

Replacement 3 Brush sets

For 1/2 gallon jars

**(SBW-120)** (4 lbs.) .....\$ 34.95

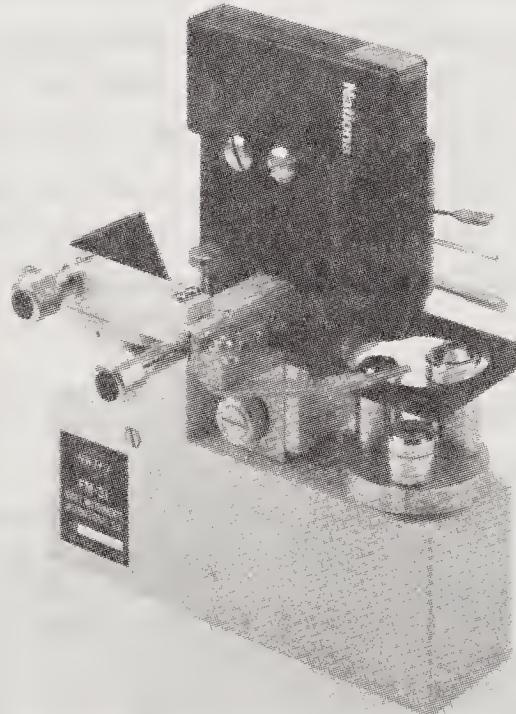
For Quart jars

**SBW-110** (3 lbs).....\$29.95

## MICROSCOPES

### The Swift Portable Field Microscope #31

Popular with professional mycologists in the U.S. and Canada, the Swift FM31 is an ingeniously engineered handheld microscope. With inverted lenses, this field microscope weighs a mere 2 lbs! Although lightweight, attention to precision and quality have been incorporated into its design. Illumination can be provided by daylight or battery-powered incandescent lamp (provided). Can be ordered with or without Phase contrast! With a 10 X eyepiece objective coupled with 4X, 10X, or 40X lenses, this palmhead microscope is preferred amongst both travelling and sedentary mycologists and researchers.

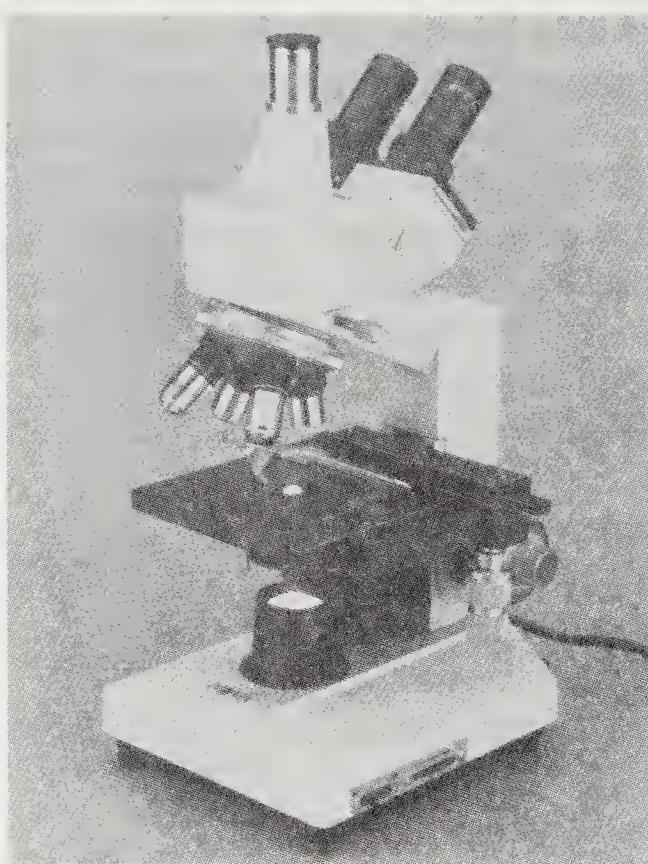


**MIC31** (4 lbs) w/o Phase Contrast.....\$ 445.00

**MIC31PC** (4 lbs) w/Phase Contrast.....\$ 525.00

**MIC31BF** (1 lb.) Blue Filter (Recommended).....\$ 9.95

**Phone: 206-426-9292 Fax: 206-426-9377**



### The Nova 820 Binocular & 850 Trinocular Research Microscopes

These microscopes represent a breakthrough in price and quality. With superb optics, the Nova series microscopes outclass any we have seen. Equipped with four objectives - allowing a magnification of 40X through 1000X (oil immersion) - each microscope comes with a finely articulated stage, base lamp w/brightness control and adjustable viewing. The built-in mechanical stage features a low position, coaxial drive and ball bearing sideways. Complete with autostop, prefocusing system. Warrantied for 1 year, parts and labor.

<b>MIC750</b> University Monocular (25 lbs.).....	<b>\$ 650.00</b>
<b>MIC820</b> The Graduate Binocular (29 lbs.).....	<b>\$ 950.00</b>
<b>MIC850</b> Research Trinocular (38 lbs.).....	<b>\$ 1250.00</b>

## MICROSCOPE ACCESSORIES

### Universal Camera Adapter for Nova Series Microscopes

Universal 872 & "T" Adapter. For adapting most professional cameras to trinocular microscope, please call before ordering.)

<b>MIC850AC</b> (2 lbs.).....	<b>\$ 95.00</b>
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### Immersion Oil

An environmentally safe, non-drying immersion oil for 1000X microscopy. 120 CC or 4 fluid oz.

<b>MICIO</b> (.25 lbs.).....	<b>\$ 15.95</b>
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### Droplet Bottles for Oil Immersion

1 oz. droplet bottles for dispensing immersion oil.

<b>MICDB</b> (.10 lbs.).....	<b>\$ 3.00</b>
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### Glass Slides

Precleaned glass microscope slides, measuring 25mm. x 75 mm. x 1 mm. thick. 72 slides per box.

<b>MICGS</b> (.50 lbs.) .....	<b>\$ 9.95</b>
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### Glass Cover Slips

Optically clear glass cover slips measuring 22 x 22 mm. No. 1.5 thickness. 138 slips per box.

<b>MICCS</b> (.10).....	<b>\$ 4.95</b>
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## INOCULATION TOOLS & ACCESSORIES

### FP's Back-Filled 2-20 ml. Inoculation Gun

A substantial improvement in performance, quality, and price is achieved with this newest version of the pistol grip syringe gun. This stainless steel gun allows the pumping of sterile liquids or suspended mycelia in 2 to 20 ml. strokes. Perfect for spawn generation techniques that call for drawing mycelia from a remote reservoir and then transferring it to sterilized media. Much faster than earlier versions, coming with a 2 1/2 ft. long vinyl tube. Autoclavable. (We recommend pairing this unit with our Eberbach blenders/stirrers.)



<b>IG 220</b> (3 lbs).....	<b>\$ 79.95</b>
<b>IG 225 (Extra gasket set/"o" ring set)</b> (.25 lbs.).....	<b>\$ 5.50</b>
	Shipping - \$3.50

### Inoculation Needles

13 gauge, large bore inoculation needles. (Void where prohibited by law. Not for human or animal use.)

3 1/2 " long straight needle <b>IN-312</b> (.10 lbs. ) .....	<b>\$7.00</b>
3 3/4" long heavy gauge 2-opening dispersing needle. <b>IN-334</b> (.10 lbs. ) .....	<b>\$9.50</b>

### Inoculation Plungers (Syringes)

Plastic, autoclavable. (Void where prohibited by law. Not for human or animal use.)

30 cc <b>IP-30</b> (.10 lbs.) .....	<b>\$4.50</b>
60 cc <b>IP-60</b> (.10 lbs.).....	<b>\$6.50</b>

### Rubber Latex Sheeting

This latex allows penetration by a needle and closes upon retrieval. It is recommended for those designing containers for growing spawn inoculated via the syringe/liquid inoculation method. Sheets measuring 12" x 12".

<b>RLS-12</b> (.20 lbs.).....	<b>\$9.95</b>
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### Sawdust Palm Inoculator

Measuring 14 in. long, this palm thrust inoculator facilitates the rapid inoculation of logs using sawdust spawn. With each stroke, a 1 x 3/8 in. plug of spawn can be inserted into the log. The spring activated shaft returns to position allowing for the next inoculation with ease. Complete with comfortable hand grip, a 2 inch flat palmer, all brass shaft.

<b>SPI100</b> (1 lb.).....	<b>\$24.95</b>
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**Fungi Perfecti** stocks **Eberbach** containers for devotees of the liquid inoculation technique. These containers are autoclavable. Partially fill with water, autoclave in your pressure cooker. Transfer an entire dish of mushroom mycelium into it. Place the container on a stirrer, activate, and in five seconds or less there are millions of tiny fragments of hyphae which can be transferred into sterilized grain. This technique minimizes contamination, accelerates colonization, maximizes the potential of your mycelia, and tremendously speeds up the inoculation/incubation process. The cultures and time you save will more than make the cost worthwhile. One culture grown on a 100 x 15 mm. petri dish can effectively inoculate 100-300 cups of grain using these stirrers! In fact, some mushroom species grow too slowly via the traditional methods of propagation, and defeat would-be spawn makers. With these stirrers, mycelium of difficult-to-grow species can be expanded quickly and efficiently. In our opinion, these stirrers are integral to any professional spawn laboratory.



**250 ml. Eberbach Container** Fitted with an air-tight removable lid.  
**EB-250** (2 lbs.) ...\$149

**500 ml. Eberbach Container** With a screw cover and stainless steel blades.  
**EB-500** (3 lbs.)....\$129

**1000 ml. Eberbach Container** Equipped with an air-tight sampling plug 1/2" in diameter that is perfect for the insertion of a syringe or pipette with minimal risk of contamination. Cover also screws off. We highly recommend this unit.  
**EB1000** (6 lbs.)...\$379



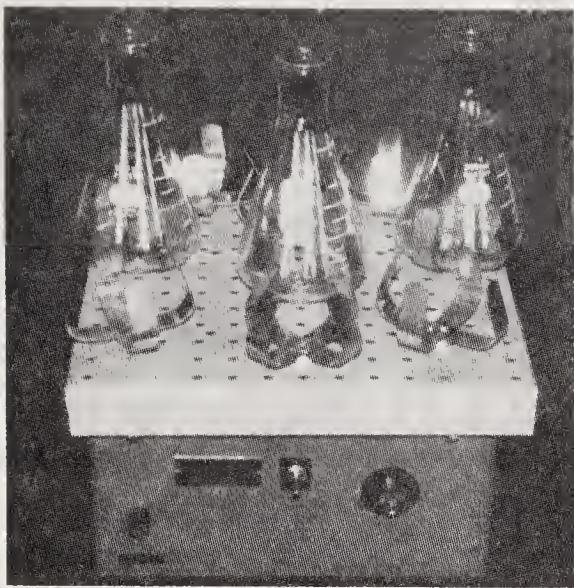
### **Waring 700 High Speed Blender**

A high speed blender designed for the Eberbach 250, 500, or 1000 ml. containers.

**WB-700** (10 lbs.)...\$109  
 Compatible with the Model 219 Variable Motor Speed Control.  
 (See page 55. )

**Phone: 206-426-9292**

**Fax: 206-426-9377**



## Shaker Tables

**Fungi Perfecti** offers complete line of shaker tables for the fermentation of fungi and can custom configure tables with media flasks for your specific fermentation needs. We stock one table, the ST6130, which holds either: 9 500 ml. erlenmeyer flasks; 9 1000 ml. flasks; or 4 2000 ml. flasks. The flat table has 156 holes which allows the precise positioning of media flasks. The ST6130 is well suited for most needs. Occupying a minimum of table space (14 x 14 inches), and powered by a 1/60 HP motor, its speed can be varied between 0-250 rpm. A 3/4 inch circle is described by every point of the shaker platform.

(115 v., 50/60 Hz. For 230 v., 50-60 Hz add \$ 70.)

**ST6130** (27 lbs.) ..... \$ 875.00

Flask Holders:

**STFH500** (1 lb.) for 500 ml. flasks..... \$ 16.00 ea.

**STFH1000** (1 lb.) for 1000 ml. flasks..... \$ 23.00 ea.

**STFH2000** (1 lb.) for 2000 ml. flasks..... \$ 68.00 ea.

## Magnetic Stir Plate

A stir plate having a working surface of 5 x 7 inches is well suited for most culture purposes, complete with speed control. Comes with a magnetic stir bar.

**MSP-122** (5 lbs.)..... \$ 179.00

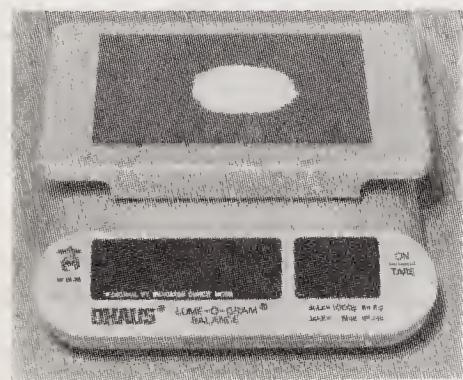
## Floating Stir Bar

The stir bar laboratory technicians dream about. Greatly increasing stirring efficiency.

**FSB-100** (.10 lbs.) ..... \$34.00



## SCALES



### The Lume-O-Gram

Represents a breakthrough in the price of digital electronic balances. Having a 2000 gram capacity in 1-2 gram increments, this unit is battery operated, featuring a large digital display and backed by a six month warranty. (Batteries included.)

**LOG-1000** (6 lbs.) ..... \$129.00

Additional polypropylene scoop **LOG-1025** (3 lbs.)... \$ 12.95

## The Acculab Digital Scale

More sensitive than the Lume-O-Gram, the Acculab weighs up to 2000 grams with an accuracy of 1/10 gram. Digital display. Six month warranty. (Battery not included.)

**LOG-1000** (6 lbs.) ..... \$169.00

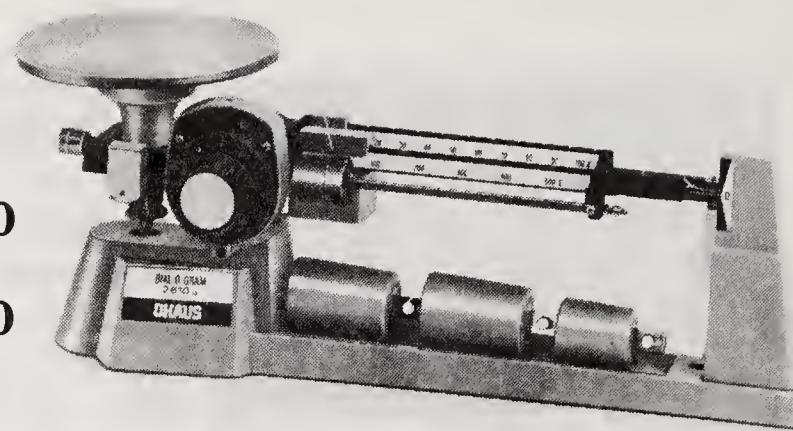
## The Dial-0-Gram 1620

The Dial-0-Gram accurately weighs to a 1/10 of a gram to 1650 grams.

**DOG-1620** (18 lbs.) .....\$199.00

Polyscoop for easy dispensing of media.

**DOG-1625** (2 lbs.).....\$19.00



## LAMINAR FLOW HOODS FOR TISSUE CULTURE

These finely crafted desktop laminar flow hoods produce a localized sterile environment in which to conduct inoculations without danger of airborne contamination. Made of imported 9-ply birch hardwood, the Series II and Series III hoods come with an acrylic shield that directs airflow. Their unique designs allow unrestricted hand movement while not impairing vision. A powerful fan pushes air through a .3 micron filter, screening out nearly all spores of contaminants. Each filter has been scanned centimeter by centimeter and is fully guaranteed. Perfect for tissue culture (cloning) of less than comparable models in the \$2000-\$5000 range. The cost of a hood is quickly offset by the cultures, time and money saved. These hoods can be offered at such low prices because we are the manufacturers. And they have been designed specifically for mushroom culture by a practicing mushroom cultivator. Hoods are in stock at most all times. Call for delivery schedule.

### The Series I Hood

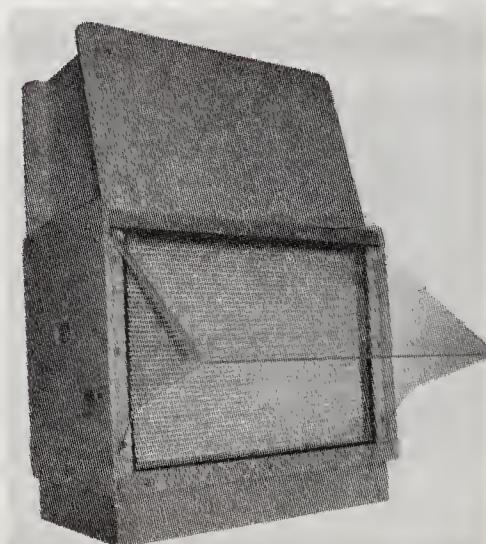
Our least expensive laminar flow hood is provided as an easy-to-assemble kit. This unit comes complete with a scanned 99.99% 24 x 12 inch HEPA filter, 1/8th HP fan, 5-ply birch housing, screws, and brass handles. All you need for assembly is a screw driver and caulking gun. This mini-hood is easy to carry and is ideal for "on the road" tissue culturing of specimens in the wild. For those who have a limited budget, the **Series I** is uniquely affordable.

**LFH-I** (42 lbs).....\$395.00

### The Series II Hood

Our popular deluxe hood that conserves space and has a built-in two level, fold-out shield that protects the filter face when not in use. Complete with prefilter housing. The workmanship on this unique laminar flow hood is outstanding. They are currently in use by government laboratories, professional spawn laboratories, and home cultivators in this country and abroad. Employing a scanned 99.99% 24 x 18 inch HEPA filter.

**LFH-II** (90 lbs).....\$950.00



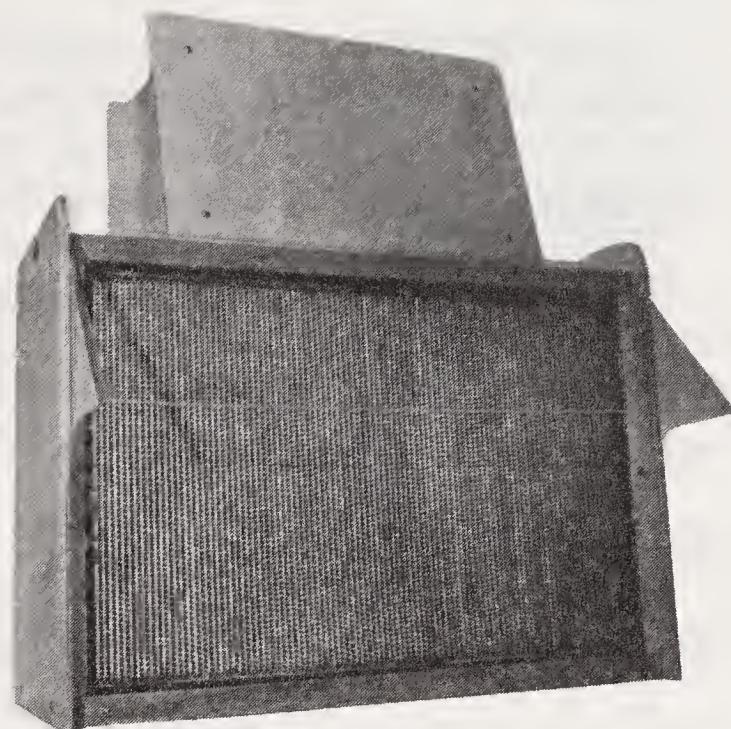
**Phone: 206-426-9292      Fax: 206-426-9377**

## The Series III Hood

Our top-of-the-line hood, the Series III is the professional hood for the serious mushroom grower. Utilizing a 3' x 2' x 5.8" scanned 99.99% micron filter, the **Series III** provides enough room for two tissue culturists working side by side. This two station hood comes with an airflow shield and prefilter assembly. Complete with accessories.

**LFH-III** (120 lbs).....\$1200.00

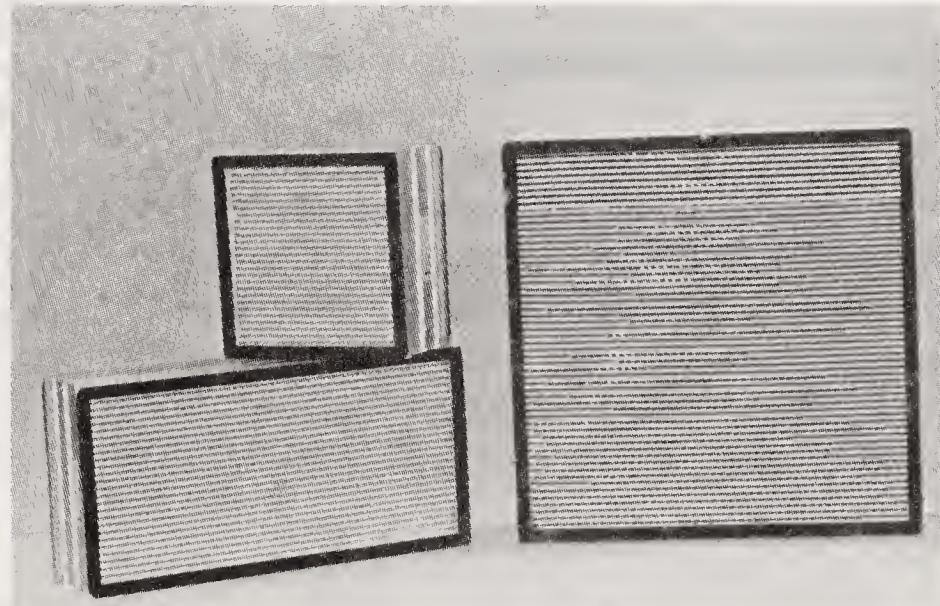
All hoods are sent freight collect. Please call for specific arrangements.



## AIR FILTERS

### Micron Filters (Metal Framed)

Custom manufactured to FP's critical specifications, these scanned water-proof high efficiency particulate air (**HEPA**) filters represent a breakthrough in quality and price. Filters are stocked in six dimensions and screen out all airborne contaminants down to **.3 microns** with a guaranteed efficiency of **99.99%**. Our micron filters are individually **scanned** and tested for quality. Coupled with an appropriately rated fan, speed control and convection tubing, a highly controlled, positive pressurized, sterile environment can be created within the laboratory or growing room. These filters are used in the construction of laminar flow hoods throughout the microbiological industry. They are also employed by computer manufacturers, nuclear laboratories, survivalists, allergy sufferers, photographers, and many others with requirements for clean air.



### For the spawn laboratory:

Dimensions	99.99% Efficiency	Price
12 x 12 x 5.8 inches (9 lbs.)	MF-1212.....	\$89.95
24 x 12 x 5.8 inches (11 lbs.)	MF-2412.....	\$119.95
24 x 18 x 5.8 inches (15 lbs.)	MF-2418.....	\$159.95
24 x 24 x 5.8 inches (19 lbs.)	MF-2424.....	\$229.95
36 x 24 x 5.8 inches (22 lbs.)	MF-3624.....	\$289.95
48 x 24 x 5.8 inches (40 lbs.)	MF-4824.....	\$329.95

A new generation of filters, called **ULPA**'s, are now available. They filter airborne particulates down to .1 micron with a **99.999%** efficiency. This efficiency exceeds the practical needs of most tissue culturists but we welcome inquiries. We can custom quote any an **ULPA** filter of your specifications.

We also stock **99%** filters which are primarily used for air filtration into growing rooms. They have approximately one half of the resistance as the **99.99%** filters. Made with waterproof media, these filters are operable in 100% humidity environments.

### For the growing room:

Dimensions	99% Efficiency Waterproof	Price
<b>12 x12 x 5.8 inches WMF-1212</b> (9 lbs.) .....		<b>\$74.95</b>
<b>24 x 24 x 5.8 inches WMF-2424</b> (20 lbs.) .....		<b>\$189.95</b>

(For fans to match these filters, see pages 54 & 55.)

### Electrostatic Air Filters

A cleanable, replaceable electrostatic filter that screens out contaminants down to .1 microns with a **99%** efficiency. These filters are especially applicable for primary air filtration into sterile laboratories and/or growing rooms. (They are, however, not recommended as a component for a laminar flow hood as filter efficiency is inadequate.) HEPA filters are rated at a much higher order of efficiency, **99.99% at .3 microns**. Electronic filters are rated only to **99% at 1 micron**. This difference is significant.

### Large Electrostatic Filter

Measuring 16 x 20 x 3 inches. Static pressure drop of .23 in. at 1200 CFM. <b>EAF-1620</b> (10 lbs) .....	<b>\$ 395.00</b>
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### Coarse Prefilters

These 30% prefilters are essential for preserving the integrity of both electrostatic and HEPA/ULPA filters. Effectively filtering out 30% of airborne contaminants 1 micron in diameter, their associated pressure drop is modest, around 1/10th inch (SP). Measuring slightly less than 20 x 25 x 2 inches.

<b>CPF3030</b> (2 lbs.).....	<b>\$ 8.00</b>
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## SPAWN MEDIA FILTERS

### Synthetic filter Discs

To be used separately or in conjunction with one piece lids, these filters fit neatly within the rim and allow air exchange but prevent contaminant spores from entering. Sterilizable and reusable for life. (Not for food canning.) Available in sets of 100. 99.97% efficient at .3 microns.

For regular mouth jars (70 mm. in diameter)

**SFD-70** (1 lb) ..... \$44.95

For wide mouth jars (90 mm. in diameter)

**SFD-90** (1 lb) ..... \$54.95

For gallon jars (110 mm. in diameter)

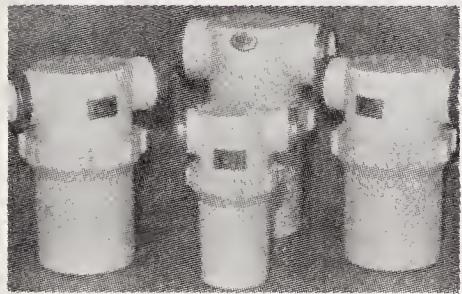
**SFD-110** (2 lbs) ..... \$64.95

For 2.5 or 4 gallon jars (125 mm. in diameter)

**SFD-125 (Set of 100)** ..... \$74.95



## WATER FILTERS & ACCESSORIES



### Coarse Particulate Line Strainers

Low pressure drop filters that effectively filter out suspended sediments from water systems using a # 40 mesh removable screened basket. Made of high impact nylon. Female threaded. Maximum pressure: 100 psi. Housing white except for 1/2 inch unit which is clear.

1/2inch(Clear) **WLS-50** (.5 lbs) ..... \$14.00

3/4 inch **WLS-75** (.5 lbs.) ..... \$19.00

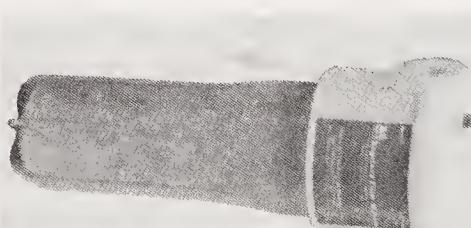
1 inch **WLS100** (1 lb.) ..... \$24.00

1 1/2 inch **WLS-125** (1.25 lbs) ..... \$29.00

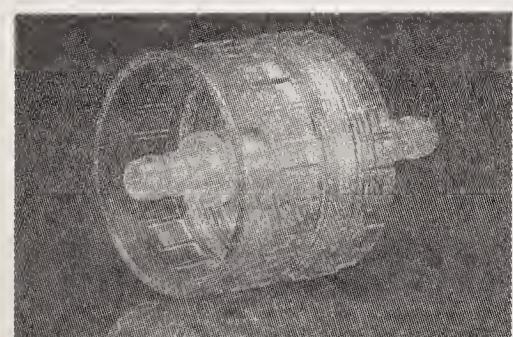
### 5 Micron Sediment Filter & Cartridge

A 5 micron filter membrane removes all visible particles from water including rust, iron, silt, dirt, and scale. The PVC cartridge has a standard 3/4 in. inlet and outlet, making for easy installation. Cartridges are replaceable.  
5 Micron Cartridge/Filter System.

**WLF-1000** (5 lbs) ..... \$39.95



Replacement 5 micron Filters **WLF-1005** (2 lbs) ..... \$5.25



### In-Line Micron Filters

Designed for in-line filtration of liquids or gases - particularly useful for *in vitro* laboratory experiments. Holder is made of tough, transparent polycarbonate, so assembly can be checked and filtration can be observed. Unit can be used for either vacuum or pressure filtration. Unscrew unit to insert 47 mm membrane, which is supported on

both sides by polypropylene plates. Biologically inert silicone O-ring seals the membrane and prevents by-pass. Removable tubing connectors on either end fit 3/8" I.D. tubing. Holding with membrane is fully autoclavable. Overall length, including tubing connector, 100 mm (nominal). Diameter 65 mm. (nominal).

#### Holder/Filter

<b>LFH-6527</b> (1 lb.).....	<b>\$79.95</b>
Replacement Filters 2 micron filter, 47 mm. diameter sets of 10, presterilized.	
<b>LF-2347</b> (1 lb).....	<b>\$29.95</b>
.45 micron filter, 47 mm. diameter sets of 10, presterilized.	
<b>LF- 4547</b> (1 lb.).....	<b>\$29.95</b>

(We can supply filters for the fractional separation of spores based on sizes. Please send us your specific requests and we will respond with details.)

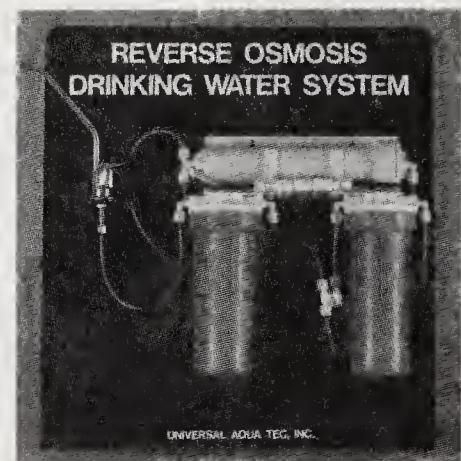
### Three Stage Reverse Osmosis Filtration System

We have investigated water filtration systems for several years. After considerable study, we are convinced that reverse osmosis systems offer the most filtration efficiency for the money. (For excellent analyses of the various systems, we refer you to the Jan. 1990 issue of *Consumer Reports* and the Sept/Oct. 1989 issue of *Harrowsmith Magazine*.)

This system utilizes water pressure ranging from 40-60 psi. Three in-line filters are employed. The first stage, the prefilter, screens out particulates down to 5 microns. The second stage, utilizing an extremely fine pored semi-permeable membrane, results in truly contaminant free water- free of bacteria, all organic pesticides, herbicides, fungicides, PCB's and other industrial pollutants. This highly purified water is then passed and stored in a 3.2 gallon storage tank. The final stage is a post-filter. At this stage, activated carbon is used to remove any residual gases or chlorine. Finally the water is dispensed through its own spigot.

At normal operating pressures, 10 gallons of pure water is generated per day. Shut-off is automatic when the reservoir tank is full. This system is easy to install and clearly is a fantastic buy. Warrantied for 5 years. Buying bottled water seems exorbitant when you can generate better quality water at home. All materials are FDA approved. Highly recommended.

**WRO-1000** (35 lbs) ..... **\$ 279.95**



### Replacement Filters

#### Replacement Osmosis Filter Membrane

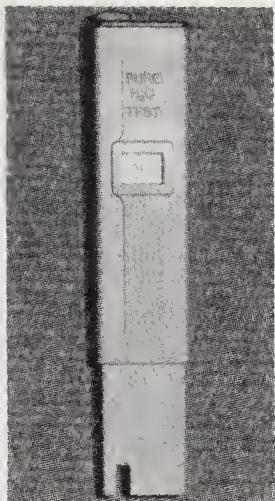
**WRO-OF** (5 lbs.)..... **\$ 59.95**

#### Replacement Prefilter-5 Micron

**WRO-PF1** (2 lbs)..... **\$ 5.00**

#### Replacement Postfilter-Activated Carbon

**WRO-PF2** (2 lbs.)..... **\$ 15.00**



### Pure H2O Tester

This is an excellent pocket sized device for measuring water purity, in degrees of their electrical conductivity (in micro-Siemens = micromhos). Water becomes increasingly conductive with higher concentrations of salts, minerals, and dissolved solids. Ultra-pure distilled water has a reading of .5- 10. "Good" city water often reads 50-80 on the micro-Siemen scale. "Poor" quality water has values of 300 and above. We recommend measuring water used before and after filtration. Since poor water quality can great affect every aspect of the mushroom life

cycle, the **Pure H2O Tester** is useful at all stages of the mushroom growing process. Accurate within 2%. Resolution to .1 **u S**.

**PHT-1000** (1 lb.) ..... \$ 59.95

## pH TESTERS

### Colorphast pH Indicator Strips

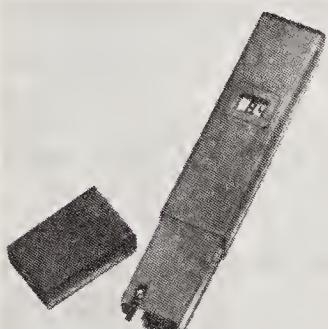
Non-bleeding, tri-color strips that give accurate measurements of acidity/alkalinity in .5 increments. Far superior to roll type pH paper. 100 strips in each.

<b>pH range 0-6.0 PH-060</b> (.10 lbs)	.....	<b>\$14.95</b>
<b>pH range 5.0-10.0 PH-510</b> (.10 lbs.)	.....	<b>\$16.95</b>
<b>pH range 0-14.0 PH-014</b> (.10 lbs.)	.....	<b>\$19.95</b>



### Pocket pH Pen

A pocket sized sensor that electronically reads and displays via LCD pH values with the accuracy of 1/10th of a pH point. Measuring only 5 1/2 inches in length. Battery life: 1000 hours. Adjustable. Warrantied for 6 months. Buffer/Standard (pH 7.01) should be ordered separately.



<b>PH-100</b> (1 lb.)	.....	<b>\$ 59.95</b>
500 ml. pH Standard <b>PH-701</b> (1 lb.)	.....	<b>\$ 8.95</b>

### Moisture and Acidity Meter

This remarkable unit simultaneously reads the moisture content and pH of the substrate into which it is inserted. It is especially useful for composing the casing soil and for insuring maximum pinhead formation. Effective Range: pH 4 - pH 9.

**PH-200** (1 lb.) ..... \$ 99.95



## MISCELLANEOUS CULTURE SUPPLIES

### Shoe Shields

Reusable 20 gauge latex boots that can be stretched over street shoes to protect laboratory environments from contamination by footwear. Made of non-woven fabric that breathes to reduce heat build-up. Since 99% of all contaminants are within a one foot zone off the floor, shoe protection significantly reduces risk from this source. One size fits all.

**Per Pair SSH-20 (.10 lb.).....\$2.50**



### Decontamination "Sticky-Mat" Floor Pads

Primarily used for the laboratory, each package contains 30 peel off mats. Since 99% of all contaminants are within one foot of the floor, the contamination vector that footware poses is substantial. You can reduce this risk through the use of these tacky mats. When you see the amount of debris they remove from your feet, you'll come to appreciate their usefulness. We have also found another use. By incubating your cultures on a decontamination pad, mites and other motile organisms are prevented from travelling from culture to another. Hence, these mats can also work to limit cross-contamination between cultures. We strongly recommend trying them.

**Sets of 30 DFP-30 (4 lbs) .....\$ 45.00**

**Case of 120 DFP-120 (16 lbs).....\$160.00**

### "Dust" Filter Masks

Cotton filter masks that protect workers against airborne spores and/or dust. Disposable and lightweight. Boxes of 50. Essential for indoor growing environments where concentrations of spores occur.

**DFM-50 (1 lb.).....\$12.00**

### Laboratory Gowns

Standard white laboratory gown with pocket. Cotton/polyester. Large washable.

**LGL-100 (2 lbs.) .....\$39.00**

### Laboratory Caps

Caps for containing hair and contaminant laden particles associated with one's head. 100 per box. Large.

**LCL-100 (3 lbs.).....\$89.00**

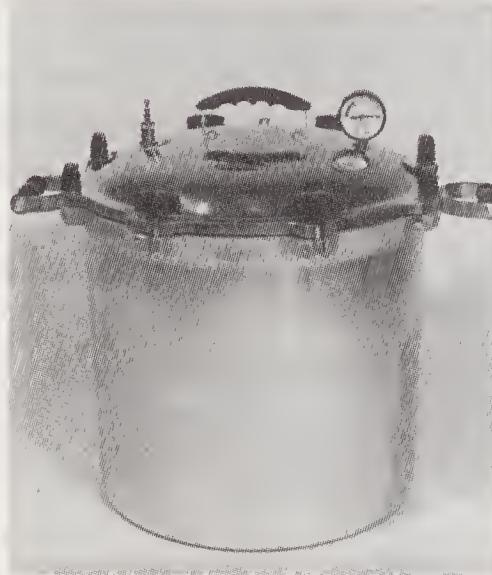
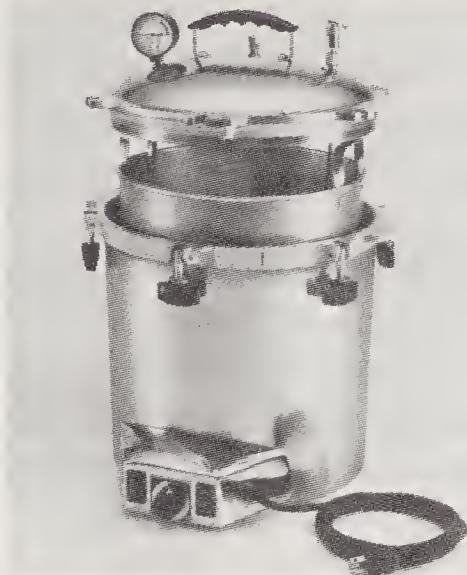
### 99% Isopropanol

5 Gallons of nearly pure isopropanol, the alcohol most effective as a disinfectant in the lab. Highly flammable. Should be diluted to 80% for maximum benefit.

**ISO-500 (25 lbs.).....\$79.00**

**Our Mailing Lists Have Never Been & Will Never Be Sold!**

# PRESSURE COOKERS, STERILIZERS, & ACCESSORIES



## ALL AMERICAN PRESSURE COOKER/ STERILIZERS

These pressure cookers are by far the highest quality made. They have several superior safety features. There are no rubber gaskets to replace, and steam is not emitted once sterilization temperatures have been achieved. Each cooker comes with a rack and an instruction/recipe booklet. We maintain a substantial stock. (We have been told by many our prices are the best in the country. Call us if it's not.)

### The 75X Electric Sterilizer

The 41 X is basically a 941 sterilizer unified with a built-in, thermostatically controlled heating element. This is the largest in this series. A fully self-contained model allows precise sterilization of media without having to purchase a separate burner. Ideal for laboratories throughout the world. Please specify 110 v or 230 v. Highly recommended. Inside dimensions: 15.25 in. diameter, approximately 17 in. high.

**PCS75X (52 lbs.)..... Call for Current Price**

### The 25-X All-American Electric STEROCLOAVE

The 25-X is a self contained, gasketless pressure sterilizer, complete with heating element, thermostat, and indicator light. Popular with cultivators, doctors, and laboratories worldwide, this unit stands 19 inches high having a 12 1/2 in. inside diameter. Forming a vacuum upon cooling, this 25 quart sterilizer is preferred by many professional tissue culturists. Highly recommended for processing tissue culture media. (110 watts, 110 volt AC)

**25X (31 lbs.) ..... \$ 350.00**  
**Shipping - \$15.00**

Model#	Lbs.	Inside Diameter	Inside Height	Outside Height	Factory Suggested	FP'S Price
<b>PCS921</b>	<b>(22)</b>	<b>12.25 in.</b>	<b>1.00 in.</b>	<b>15.25 in.</b>	<b>\$ 144.00.....</b>	<b>\$ 129.95</b>
<b>PCS930</b>	<b>(29)</b>	<b>12.25</b>	<b>15.00</b>	<b>19.00</b>	<b>\$ 195.00.....</b>	<b>\$ 179.95</b>
<b>PCS941</b>	<b>(40)</b>	<b>15.25</b>	<b>15.00</b>	<b>19.00</b>	<b>\$ 330.00.....</b>	<b>\$ 289.95</b>
<b>PCS25X</b>	<b>(30)</b>	<b>11.20</b>	<b>13.50</b>	<b>16.50</b>	<b>\$ 495.00.....</b>	<b>\$ 395.00</b>
<b>PCS75X</b>	<b>(46)</b>	<b>15.25</b>	<b>17.50</b>	<b>20.50</b>	<b>\$ CALL.....</b>	<b>\$ CALL</b>

(The PCS25X & PCS75X are presumed to be 120 volts unless 240 volts is specified.)

We also have replacement parts:

<b>Pressure Gauge PCS-72</b> (1 lb.) .....	<b>\$6.50</b>
<b>Stop-Cock PCS-65</b> (1 lb).....	<b>\$6.50</b>
<b>Bakelite Handle PCS-76</b> (1 lb).....	<b>\$5.00</b>
<b>Rubber Blow-out Valve</b> (.10 lbs).....	<b>\$1.50</b>
<b>High Quality Excess Pressure Relief Valve PCS-2050</b> (.25 lbs).....	<b>\$ 29.95</b>

### **Sterilization Indicator Strips**

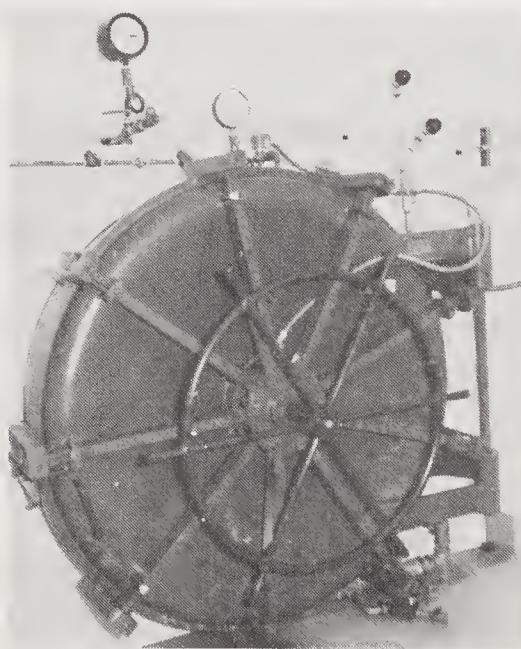
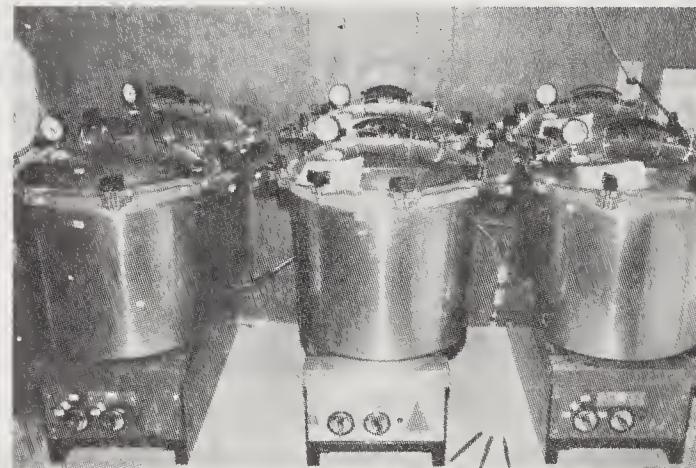
Heat sensitive strips that change color to indicate that sterilization temperatures have been achieved. Especially useful for checking degrees of sterilization in heavily packed autoclaves.

Set of 10 <b>SIS-264</b> (.25lbs).....	<b>\$3.00</b>
Box of 250 <b>SIS-264</b> (2 lbs) .....	<b>\$ 34.95</b>

### **High Intensity Gas Burners**

These burners utilize natural gas or propane. Please specify. They are dial controlled for rapid, precision heating. Manufactured with quality and durability in mind. Sent factory direct, shipping charges collect.

<b>Single Burner Unit (20,000 BTU)</b>	
<b>B-100</b> .....	<b>\$295.00</b>
<b>Double Burner Unit (40,000 BTU)</b>	
<b>B-200</b> .....	<b>\$395.00</b>



### **Autoclaves/Retorts**

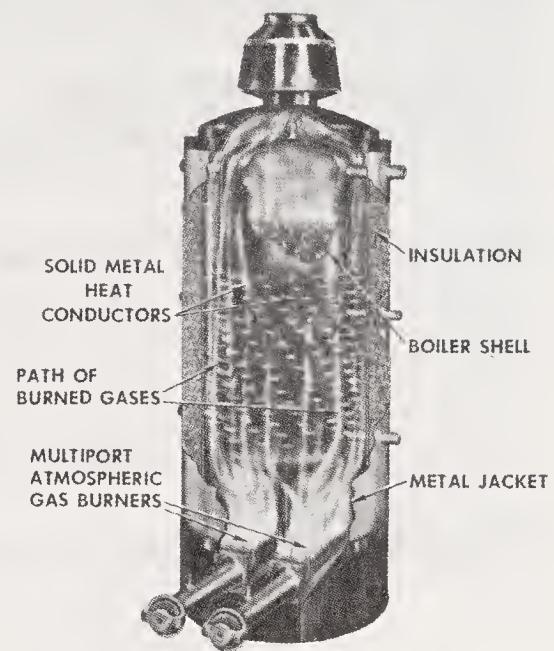
Our line of autoclaves are far below the cost of those of most manufacturers. They are constructed with 1/4 inch carbon steel, complete with Taylor controls, safety blowouts, quick opening "spider" doors, and push in carts. Horizontally and vertically configured autoclaves are available with the option of one or two doors. Recommended operating steam pressure is 15-30 psi. From 4 foot to 30 feet long, from 2 feet to 5 feet in diameter, these customized autoclaves make spawn, substrate, and/or canning commercially feasible.

Each autoclave FP sells is custom manufactured to meet the specific needs of our customers. We need more information before pricing. Please consider the following parameters to determine your needs and thus, the capacity and the configuration of the autoclave needed. ASME approved. **Prices from \$ 8,000 to \$ 30,000.**

1. Preferred size?
2. Horizontal or vertical?
3. One or two doors?
4. Specialized equipment required?
5. Are you planning to use an existing boiler to heat the autoclave? If so, what is its BTU/pressure rating?

## STEAM GENERATORS

We access a broad line of steam boilers and can custom quote any capacity and configuration you need. Please call for a quote specific to your needs.



## BIOLOGICAL EFFICIENCY

Biological efficiency is a term frequently used in the mushroom industry to describe yield potentials of mushrooms from various agricultural by-products. (Straw, sawdust, sugar cane bagasse, and banana fronds coffee plant wastes.) This formula was first developed by the button mushroom (**Agaricus**) industry.

Simply put, a yield of 1 lb. of fresh mushrooms from 1 lb. of dry substrate is considered to be 100% Biological Efficiency. Since mushrooms are approximately 90% water and the base substrate is typically raised to 75% moisture, 100% Biological Efficiency is equivalent to saying that 25% of the wet mass of the substrate is converted into fresh mushrooms.

Although such yield efficiencies are commonly achieved by experienced growers, many choose not to "chase the optimum" as their growing rooms can be better utilized by cycling in fresher material.

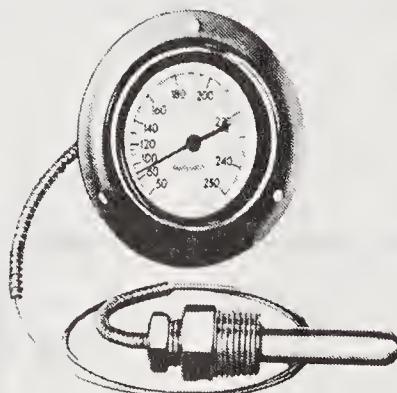
## XI. GROWING ROOM EQUIPMENT & SUPPLIES

### THERMOMETERS

#### Digital Max-Min Thermometer

Ideal for measuring temperature flux indoors or outdoors, with memory function, this unit has a temperature range of -40 to 122 °F. Powered by a 1.5 AAA battery (included), a ten foot external sensor cord allows the remote registering of temperature differentials.

**TH-1220** (1 lb.).....\$ 39.95



#### Remote Reading Thermometer

This durable, quality unit allows cultivators to read temperatures of any growing rooms, Phase II chambers, and other sensitive environments from a remote location. Readings are unaffected by the ambient temperature surrounding the heavy copper, six foot long capillary sensor. Non-electronic. Temperature range: 20-220° F.

**Th-5111** (1.5. lb.).....\$99.95

#### Immersion Thermometers

A superior bimetal thermometer that can be inserted into bulk substrates and liquids without danger of breakage. Its 3 inch dial reads easily and the stem length of 18 inches allows deep penetration. This unit has a range of 20-220° F. and can be used interchangeably for monitoring bed and pasteurization temperatures. Imported and made to last.

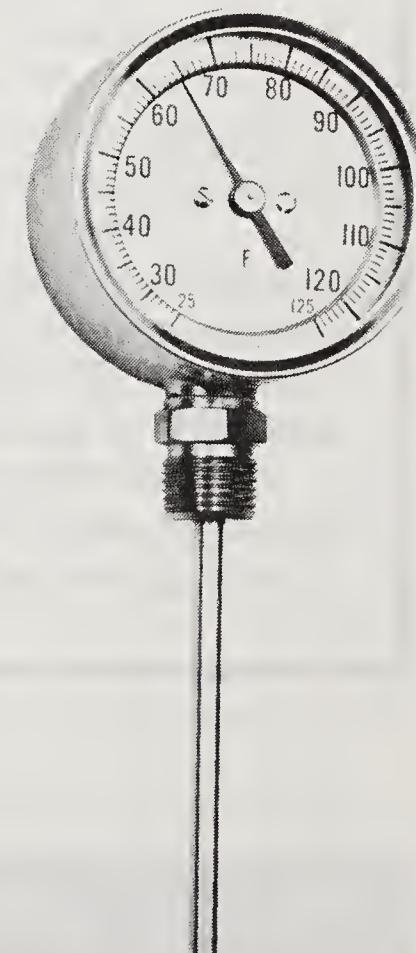
**TH-5224** (3 lbs.).....\$99.00 ▶



#### Aluminum Substrate Thermometer

A 13 1/2" long aluminum-cased, red spirit filled thermometer designed to be inserted into soils, composts, and other semi-solid materials. Having a 10-240° F. temperature range.

**TH-6011** (1 lb.).....\$24.95





### Electronic Substrate Thermometer

These are by far the best we've seen for the money. A fast response electronic thermometer 5 1/2 inches long. Accurate within 1 degrees F. and having -40 to 212\* F. range, this pocket sized unit is well suited for the spot measuring of a substrate/soil temperatures. This hand held unit measures only 5.6 x 1.1 x 0.6 inches. Battery included.

**TH-E60** (1 lb.).....\$ 39.95

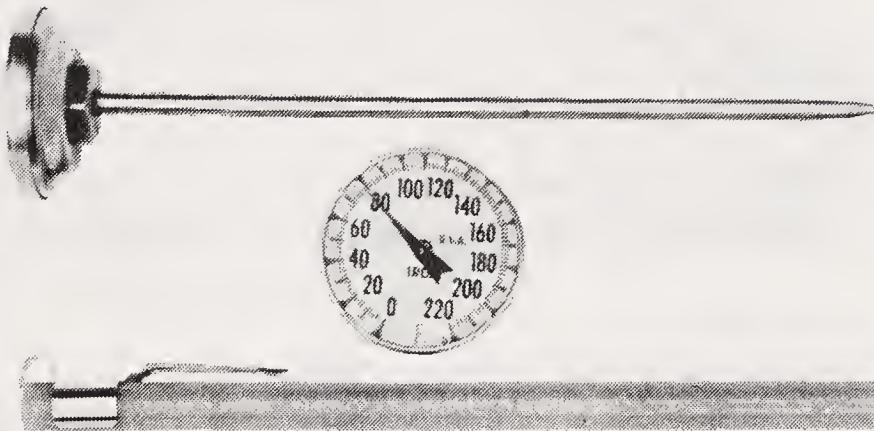
**Pocket Thermometer** A one inch dial all-metal thermometer for spot checking bed temperatures. The 5" stem is just the right length for insertion into bulk substrates during spawn running and cropping.

25-125\* F in 1 degree increments

**TH-5223A** (.25 lb.).....\$16.95

0-220\* F in 2 degree increments

**TH-5223B** (.25 lb.) .....\$16.95



### In-Line Fluid Thermometer

A 3 in. diameter dial thermometer for monitoring fluid (esp. water) temperatures. Comes with a 2 1/2 in. long, 1/2 in. NPT fixed threaded stem. 20-240\* F. range.

**TH-5224** (1.5 lb.).....\$79.95

## THERMOSTATS

Operating from 30-110 \* F., these thermostats are widely used by industries for activating heating and cooling systems.

### Single Stage Thermostat

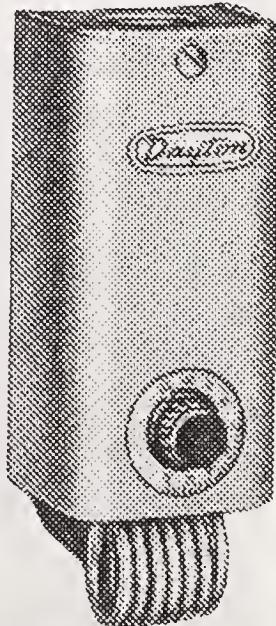
Contacts open on the rise for activating a heat exhaust fan.

**SST-206** (2 lbs.) .....\$69.95

### Double Stage Thermostat

Activating two devices, one on temperature rise, the other on temperature fall, this two stage thermostat is commonly used in growing environments for limiting temperature fluctuation. Lower and upper limits can be set within 3 degrees F.

**SST-207** (2 lbs.) .....\$84.95



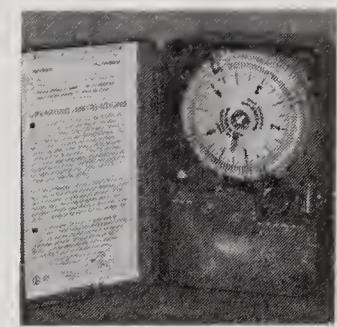
**Phone: 206-426-9292**

**Fax: 206-426-9377**

**Timers****24 Hour/15 Minute Interval Timer**

A well made 24 hour timer capable of 48 on/off functions per day. 20 amps. Can be coupled with the below described 5 Minute Interval Timer if desired.

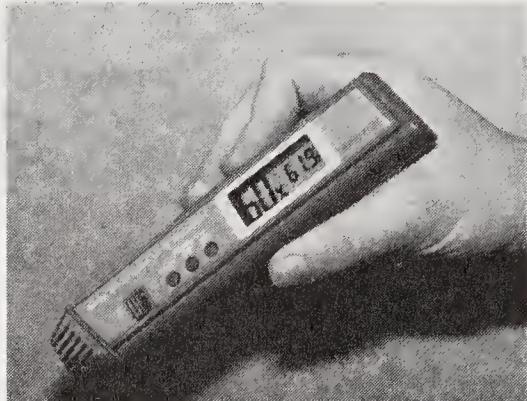
**TIM1975** ..... \$ 34.95

**5 Minute Interval Timer**

Recommended for controlling fans, misting systems, pumps, and motors, this 5 minute interval timer activates for 3-4 seconds. Ten "on-off" switches are provided with each switch. Can be expanded to 120 trippers, thus capable of performing 60 "on-off" operations per cycle. 120 volts, UL & CSA listed.

**TIM8855** (4 lbs.) ..... \$ 124.95

**TIM8855T** (.10 lbs.) Sets of 10 trippers..... \$ 2.25

**HUMIDITY SENSORS****The High Humidity Hygro-Thermometer**

This unit is increasingly more accurate at high humidities, employing a unique synthetic material. Also measures temperatures in C\* and F\*. Warrantied for one year. Can be recalibrated.

**H-7434** (2 lbs.) ..... \$39.95

**FP's Electronic Pen ThermoHygrometer**

An extraordinary electronic sensor, measuring 5.5 inches long by 1 inch on a side, this "pocket pen" thermo-hygrometer is ideal for growing room managers needing to spot-check multiple atmospheric environments in quick succession. Resolving humidity to 1% rH and temperature to .1 degrees F. within 10 seconds, readings are displayed via a .5 x 1.5 in. LCD window. Temperature range: 32-122 degrees F. or 0-50 degrees C. Humidity readings are temperature compensated for insuring accuracy. Complete with "min and max" memory function. Battery included. (Note: not for immersion into liquids.)

**TH3001** (1 lb.) ..... \$ 79.95

**Quick-Set Max-Min Thermometer**

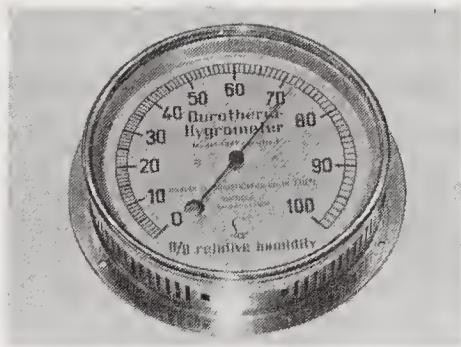
An inexpensive, wall mounted max-min thermometer with centrally located press button reset. Range: -20 to 120 degrees F.

**TH5383** (1 lb.) ..... \$ 19.95

## Polythermal Professional Hygrometer

This hygrometer is quality crafted and guaranteed to be accurate to one percent rH upon shipment. A newly developed synthetic element gives this hygrometer far better response and accuracy over time than the old style spring, or paper hygrometers. Flange allows for easy wall mounting.

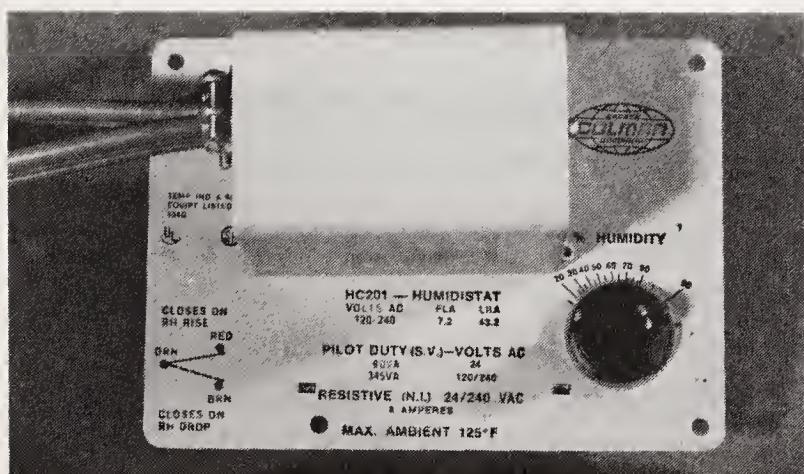
**H-7000** (2 lbs.) ..... \$109.95



## Sling Psychrometer

A practical, high quality sling psychrometer. This psychrometer, like others, uses a wet bulb and dry bulb thermometer for determining exact relative humidity and dew point. However, this one is superiorly designed for the protective case into which the thermometer inserts when not in use. Sling psychrometers are essential for calibrating hygrometers. (All hygrometers should be checked periodically for accuracy.) Highly recommended.

**SP-7011** (2 lbs.) ..... \$99.95



## HC 201 Humidistat

Having a 10-99% range with a 3-5% humidity differential, this is an excellent humidistat for controlling rH. Dial in the desired humidity and the HC 201 activates humidifiers to maintain the selected moisture level. The HC 201 becomes increasingly accurate at higher humidities. Adjustable, rated at 8 amps. Ready to wire. Simple instructions printed on face. Factory warrantied.

**HC-201** (4 lbs.) ..... \$149.95

## HUMIDIFIERS

### The Mega-Humidifier

The Mega-Humidifier is a powerful humidification device, emitting a fine mist in a 360 degree radius (or any fraction thereof.) Made of corrosion resistant materials, The Mega-Humidifier evaporates up to 3 gallons of water per hour (72 gallons per day!) using a 1/4 HP motor. Its holding chains allow suspension from a roof truss or any overhead beam. The integral motor has internal overload protection. This is the high volume humidification unit effective for growing rooms up to 20,000 cu. ft. Factory suggested price \$1150.00.

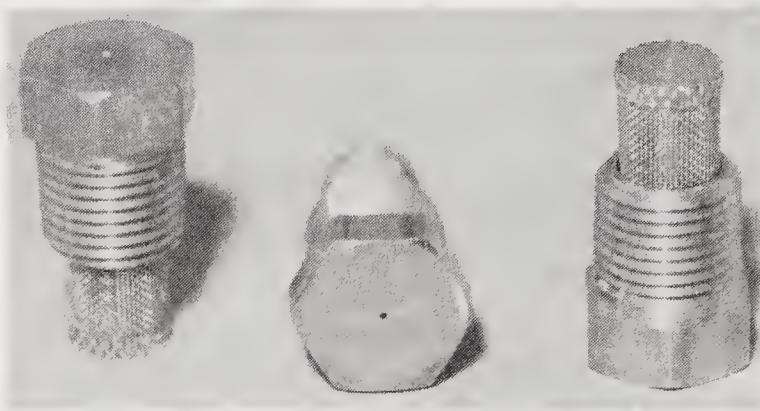
**HUM-2000** (79 lbs.) ..... \$990.00



## THE HERRMIDIFIER Humidifier

A commerical humidifier for greenhouses and mushroom growing rooms, this unit maintains rH in spaces up to 3000 cubic feet. Atomizing water to droplets approximately 10 microns in diameter, this humidifying unit transforms 6 gallons of water per day into a fine particle mist promoting mushroom and plant growth. Water level automatically regulated.

**HUM-500** (9 lbs.) .....\$249.00



## Fine Mist Fogging Nozzles

With fine mesh screens preventing clogging , these 3/8 in. male threaded nozzles are easy to install and replace. Emitting a fog-like mist at the remarkably controlled rate of *only .63 gallons/hr. at 40 psi* with a spray angle of 80 degrees. This is the nozzle for outdoor or indoor growing environments. (Also available in stainless steel.)

**MLN-500** (.10 lb.) .....\$6.50 ea.

**10 to 100** .....\$5.50 ea.

**100 or more** .....\$3.25 ea.

## L-Jet Spray Nozzles

Emitting 1/2 gallon per minute @ 40 psi with a 120 degree spray angle, these nozzles are especially appropriate for watering Shiitake logs and/or outdoor beds. 1/8" NPT thread.

**MLN-1000** (.10 lb.) .....\$4.00 ea.



## V- Jet Flat Spray Nozzles

Emitting 20 gallons per hour at 40 psi. with a spray angle of 80 degrees, these 1/8 in. NPT male threaded nozzles are used for making water brooms or "washdown" systems within the growing room.

**MLN-2000** (.10 lb.) .....\$4.00 ea.



## MISCELLANEOUS

### Venturi Siphon Mixer

Yet another ingenious device without which our lives would be more difficult. This brass adapter fits on the 5/8" faucet outlet and then connects to your hose end. A black  $<1/8$ " in capillary "take-up" tube can then be inserted into an awaiting concentrate or disinfectant reservoir (i.e. bleach). Additional solutions can then be drawn up into and mixed with the downstream water at roughly 1 gallon of concentrate for every 16-20 gallons of water. Featuring a backflow preventor and check valve, this is an excellent tool for all growing room managers who wish to wash down floors and equipment. Equally superb for injecting buffers or nutritional additives.

**VSM-100** (1 lb.).....\$ 12.95



## LIGHT

### TRIPLE RANGE LIGHT METER

A pocket size color corrected meter of reading light from 10 foot candles to 1000. Manufactured by General Electric, this light meter is essential for growers of species whose yields are influenced by light.

**LIT-214** (2 lbs.) .....\$79.95



### Water/Vapor Proof Lights



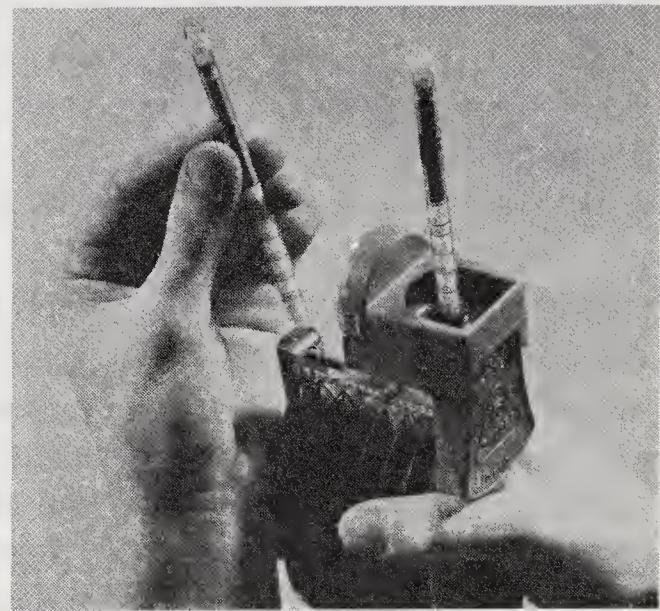
These 4 and 8 foot, double fluorescent light fixtures are designed for the type of high humidity environments in which mushrooms flourish. Equipped with a gasketed lens and multiple clamps, these light fixtures are perfectly suited for the gourmet mushroom grower. They are also recommended for the laboratory to prevent dust accumulation from the static electrical fields associated with exposed bulbs. 4 foot .77 amps.

**WPL-391** (19 lbs.) .....\$99.00

## GAS DETECTORS

### Gas Detection System

A compact high quality gas detection system that measures carbon dioxide, ammonia and assorted other gases in parts per million. Precise knowledge of gases are critical for maximizing primordia formation and development and for controlling diseases. For the commercial grower, this tool is essential for insuring yields. Comes with complete instructions and accessories. Tubes should be ordered separately. 100 cc pump, carrying case, spare parts, and instructions included.



<b>GAS-534</b> (2 lbs.) .....	<b>\$ 269.95</b>
<b>CO-2 Detection Tubes (300-7000 ppm.)</b>	
<b>GAS-202</b> (1 lb.) .....	<b>\$ 39.95</b>
<b>Ammonia Detection (10-1000 ppm)</b>	
<b>GAS-030</b> (1 lb.) .....	<b>\$ 49.95</b>

## INSECT CONTROL

### Yellow Insect "Sticky" Sheets

Bright yellow plastic sheets, coated on two sides with a specially formulated adhesive that traps flies. 30 sheets (6" x 12") per package. .

<b>SIT-26</b> (2 lbs.) .....	<b>\$ 29.95</b>
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### FP's SpinSect Insect Trapper

This is how it works. A circular black light attracts flying insects. When they are in close proximity, they are drawn to their death via an invisible vortex created by a centrally located fan within the center of the light. The flying pests are then thrown into a disposable bag where, God only knows, they somehow die or remain trapped until you enter the picture. Draws less current than a 40 watt light bulb. 15 3/4 in. high, 9 1/2 in. wide, 7 1/2 in. deep. Recommended for 500-1000 square feet.

<b>SIT-100</b> (10 lbs.) .....	<b>\$ 159.95</b>
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### Bug-Out Cloth

Bright white polyester shade fabric capable of withstanding the stresses of wind and rain. Giving 38-40% shade, this shade cloth is woven with fine inter-thread that prevents the passage of insects but allows airflow and maintains high relative humidity. This cloth is ideal for placing over fan exhaust ports and for the outdoor mushroom cultivator, washable. Available in rolls of 50 x 6 feet.

<b>BOC-300</b> (30 lbs.) .....	<b>\$ 89.95</b>
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## Liquid Copper/Sulphur

Liquid copper/sulphur has been conveniently blended for remedying and preventing the occurrence of many molds, especially *Verticillium* and *Trichoderma*.. Effective also against mites, liquid copper/sulphur is diluted and injected directly into the watering system via the Venturi Siphon Mixer. Recent articles in the scientific literature show that many gourmet mushrooms benefit from copper. Furthermore, sulphur inhibits mold and insect growth. Use only as directed. 2.5 gallons per container.

**LCS420** (35 lbs.).....\$ 44.95

## FANS & ACCESSORIES

### In-line Duct Fans

Helpful aids in boosting air volume through plastic ducting, these light weight, foam-flanged duct fans are easy to install and quiet. Warrantied for 2 years. The 6" fan delivers 200 CFM at .40 amps while the 8" fan yields 300 CFM at .46 amps.

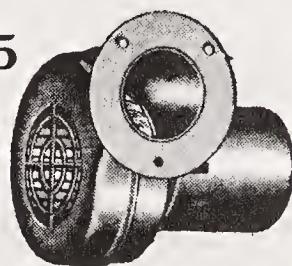
**FAN-671-6"** (4 lbs).....\$ 39.95  
**FAN-871-8"** (5 lbs).....\$ 44.95



### Mini-Blower

100 cubic feet/minute free air delivery, 80 CFM at .5" static pressure, 0 CFM (cut-off) at .8". Rated at .74 amps. The miniblower is quiet and excellent for circulation or for drying mushrooms.

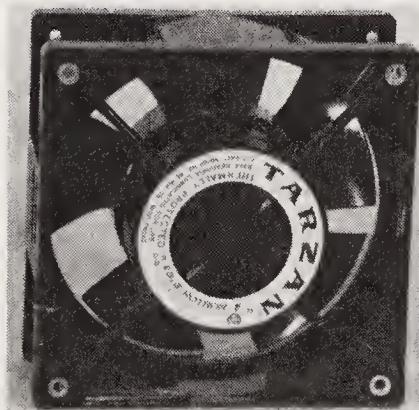
**FAN-443** (3.75 lbs.) .....\$49.95



### Tarzan Fan

350 cubic feet/minute free air delivery. A high pressure fan perfect for pushing air through 8 or 12 inch square micron filters. Yielding 90-100 CFM at 1" static pressure.

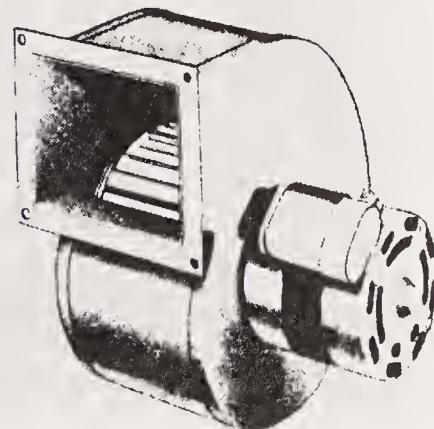
**FAN-350** (5.5 lbs.) .....\$129.95



### All Purpose Blower

488 CFM free air deliver, 217 CFM at .8" static pressure. A superb, multipurpose fan excellent for use in greenhouses, growing rooms, and for pushing air through small dimension micron filters. (12 x 12 in. and 24 x 12 in. HEPA's). Because of the attached split capacitor, a better operating efficiency is achieved.

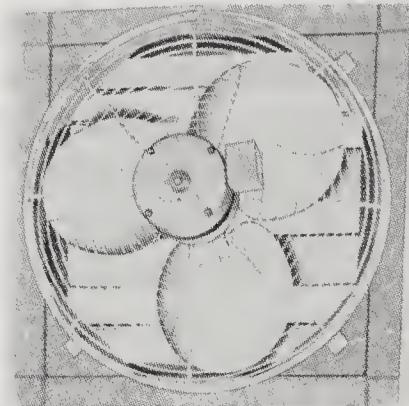
**FAN-667** (12.5 lbs.).....\$109.95



## Thermal Exhaust Fans

Exhaust fans with automatic louvered shutter that are well suited for exhausting excess heat from the growing room. Heavy duty guards are moisture and corrosion resistant. The 10" fan yields 520 CFM and draws only 1.1.amps. The 16" fan yields 870 CFM and draws 1.9 amps.

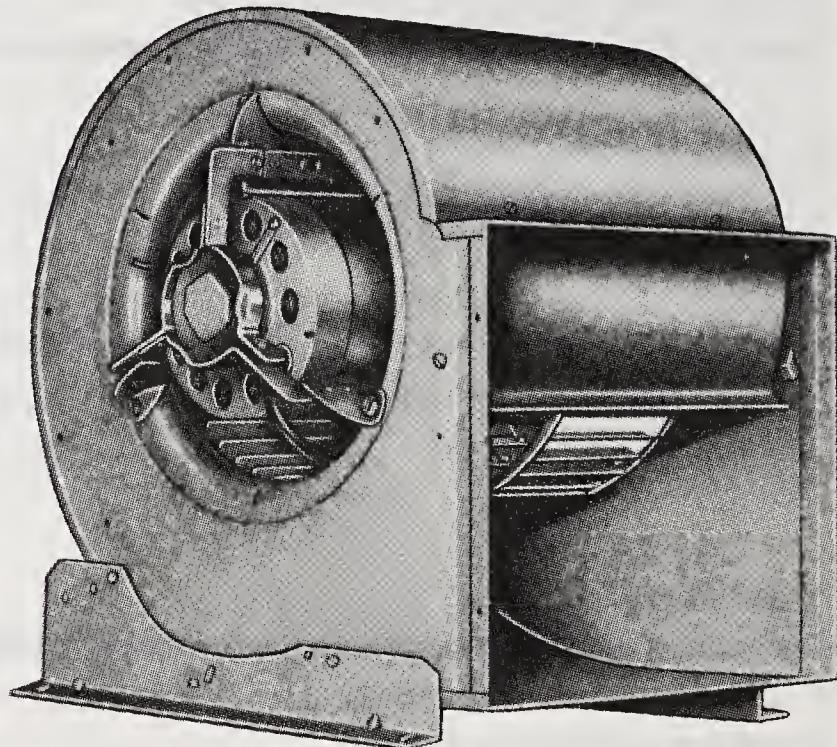
<b>FAN-819 10 inch (10 lbs.)</b>	<b>\$99.95</b>
<b>FAN-713 16 inch (12 lbs.)</b>	<b>\$169.95</b>



## 1/6 HP High Pressure Blower

Yielding 475 CFM at .8 " static pressure, this blower is especially compatible with our 24 x 18" and 24 x 24" micron filters. Rated at 5.8 amps. (Cannot be used for free air delivery.)

<b>FAN-683 (24 lbs)</b>	<b>\$179.95</b>
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## 1/4 HP High Pressure Blower

Yielding 1120 CFM at .8 in. static pressure, this large blower is well suited for use with our large micron filters. Rated at 8.9 amps. (Can not be used for free air delivery.)

<b>FAN-684 (28 lbs)</b>	<b>\$199.95</b>
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(

We can special order any fan matching your needs. Please call us first with your requests.)

## FP's Mounting Brackets

Heavy duty angle iron, manufactured by us to match the above described high pressure fans. Greatly facilitates installation.

<b>FAN-683B (5 lbs)</b>	<b>\$16.95</b>
<b>FAN-684B (6 lbs)</b>	<b>\$19.95</b>



## Variable Motor Speed Control

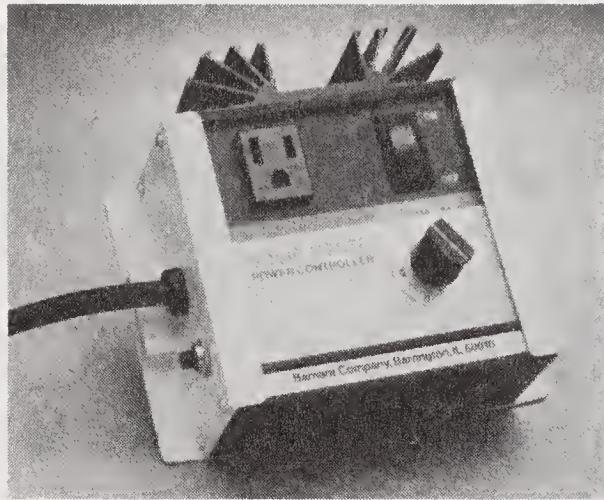
This popular speed control can power one or more fans. This model is extremely versatile with many applications. Rated at 5.0 amps, it holds a standard Buse fuse. Requires no wiring-all you do is plug it in. 120 volt.

<b>VMS-219 (3 lbs)</b>	<b>\$44.95</b>
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## High Amp Variable Motor Speed Control

A heavy duty two socketed motor speed control with 15 amp reset circuit breaker. No fuses to replace. Infinitely variable. Comes with a 6 ft. cord. 120 volt.

**VMS-1500** (3 lbs).....\$ 149.95



## PLASTIC TUBING & CURTAINS

### Plastic Air Ducting

Fungi Perfecti stocks inflatable polyethylene tubing for the even distribution of air throughout the growing room environment. This tubing is also ideal for "column culture", the growing of mushrooms in a vertical configuration. 4 mil. thickness.

6" Diameter Ducting Unpunched.

**DUC-6000** 20 ft. (2 lbs) .....\$ 7.00

**DUC-6500** 500 ft. (50 lbs) .....\$ 105.00

6" Diameter Ducting 1" holes at 4 & 8 o'clock

**DUC-6048** 20 ft. (2 lbs) .....\$ 8.00

**DUC-6548** 500 ft. (50 lbs.) .....\$ 119.00

8" Diameter Ducting Unpunched

**DUC-8000** 20 ft. (2 lbs) .....\$ 9.00

**DUC-8500** 500 ft. (60 lbs.) .....\$ 129.00

10" Diameter Ducting Unpunched.

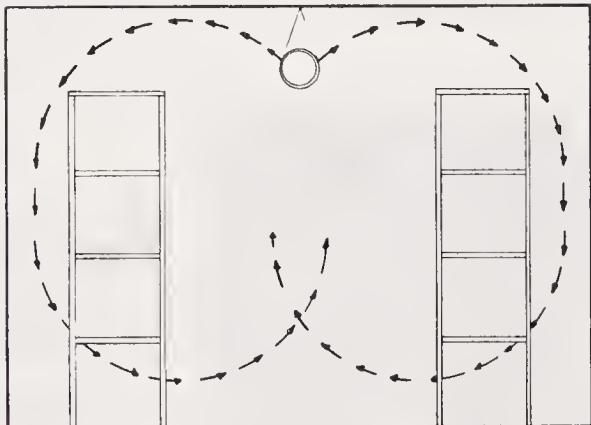
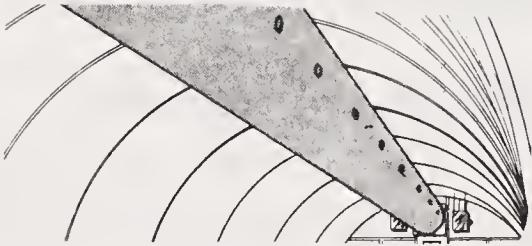
**DUC-1000** 20 ft. (2 lbs) .....\$ 9.00

**DUC-1500** 500 ft. (65 lbs) .....\$ 149.00

12" Diameter Ducting Unpunched.

**DUC-1200** 20 ft. (2 lbs) .....\$ 12.00

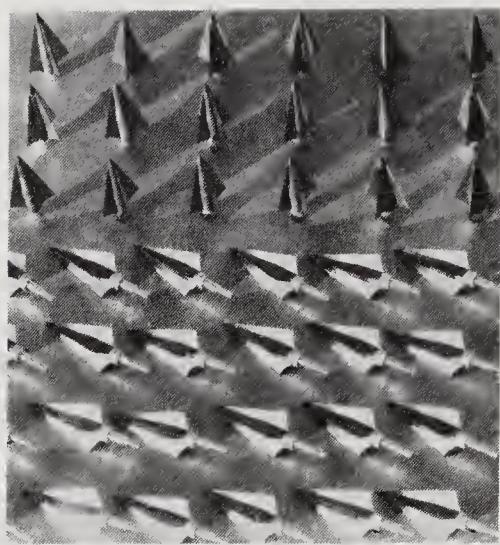
**DUC-1250** 500 ft. (79 lbs) .....\$ 179.00



## **Stainless Steel ArrowHeads**

For the perforation of plastic ducting for *Column Culture* of oyster and other mushrooms, these stainless steel 4-bladed, replaceable arrowheads are ideal. Each puncture gives a 1 1/16th inch diameter, star-shaped cutting pattern. After puncture, the flaps close, but the central hole (approx. 1/8th inch) is large enough to allow gas exchange. At each puncture, bouquets of oyster mushrooms will emerge, pushing open the flaps as they mature. This method preserves moisture while localizing primordia formation. Stainless steel blades removable/replaceable. Highly recommended for all oyster growers striving to maximize production while limiting loss of yield due to evaporation. Packages of 6.

**SSA-600** (1 lb)..... \$ 24.95



## **White Plastic Sheeting**

For the construction of a temporary growing room, this plastic sheeting is a low cost alternative. Heavy duty and highly reflective, this plastic sheeting efficiently disperses light. Dimensions: 20 x 50 ft.

**WPS-004** (24 lbs)..... \$ 149.95



## **Pass Thru Curtain**

A see through vapor barrier facilitating traffic, and allows unhindered passage through high traffic zones. Quite suitable for entries into growing and laboratory anterooms. Flaps overlap 50%.

**4' x 7' PTC-407** (25lbs.) ..... \$149.95  
**10' x 10' PTC-1010** (36lbs.) ..... \$249.95



**Fungi Perfecti is Certified Organic by Washington State Dept. of Agriculture Organic Food Certification Program**

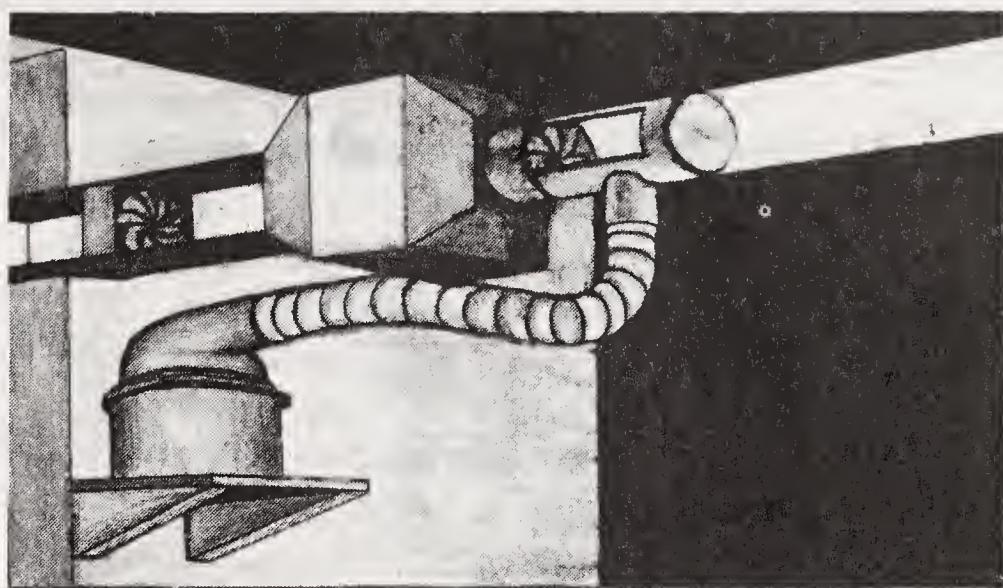


**Phone: 206-426-9292      Fax: 206-426-9377**

## AIR CIRCULATION SYSTEMS

### Air System Super II +

All experienced cultivators understand the critical role air circulation plays in the successful growing of mushrooms. Without proper air input and distribution, there is little chance of obtaining consistently large fruitings. **Fungi Perfecti** has developed an air system that has been specifically designed for the home grower. This system regulates humidity within the growing environment. Humidity is provided by utilizing water via a faucet or garden hose. Pressurized water is forced through a fine spray mist nozzle and supplies a **Humidifier** humidifier. Both can, in turn, be regulated by an on/off solenoid valve, which is activated by a humidistat. The advantage of this system is that it can be used to cool or heat the growing environment (20 degrees F. in most cases) by simply adjusting the temperature of the incoming water. Our Air System II+ Enhanced combines air distribution and humidification in one package.



### The Enhanced Air System II+ Package Includes:

- 1) A high pressure fan **and** an in-line 200 CFM Super Booster Duct Fan
- 2) A variable motor speed control for regulating the CFM of the fans.
- 3) A sheet metal housing that can recirculate the growing room's air in whatever combination desired.
- 4) A metal framed .3 micron 99% HEPA 12 x 12 x 5.8" filter efficient in 100% humidity environments.
- 5) 20 feet of perforated 6" diameter convection tubing.
- 6) A humidifier + 2 fine mist nozzles.
- 7) An on/off 1/2" solenoid valve.
- 8) A duct humidistat that becomes increasingly accurate at higher humidities.
- 9) An in-line fluid thermometer.

**ACS-002E** (44 lbs).....\$795.00

The Enhanced Air System II+ is designed for growing rooms with less than 3000 cubic feet. For substantially larger environments, the Air Circulation System III may be required.

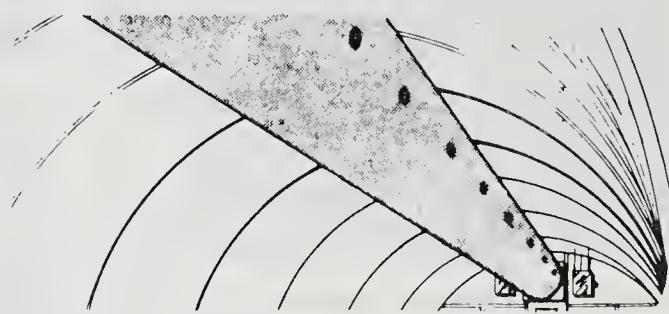
**Phone: 206-426-9292      Fax: 206-426-9377**

## Air Circulation System III

For environments from 5,000 to 20,000 cubic feet, this Air System is designed for commercial mushroom farms, especially those growing Shiitake, Enokitake and/or Oyster mushrooms. Creates a 100 % rH fogged environment at 60-70 degrees F.

### The Air Circulation System III includes:

- 1) An in-line Turbo-Duct Fan
- 2) An Electrostatic Micron Filter
- 3) 50 feet of 12" diameter Ducting
- 4) A high powered Mega-Humidifier
- 5) A HC-201 Humidistat
- 6) A Professional Polytherm Hygrometer
- 7) A Sling Psychrometer



Individually these items would total more than **\$2600.00**. We are offering this package of equipment for only:

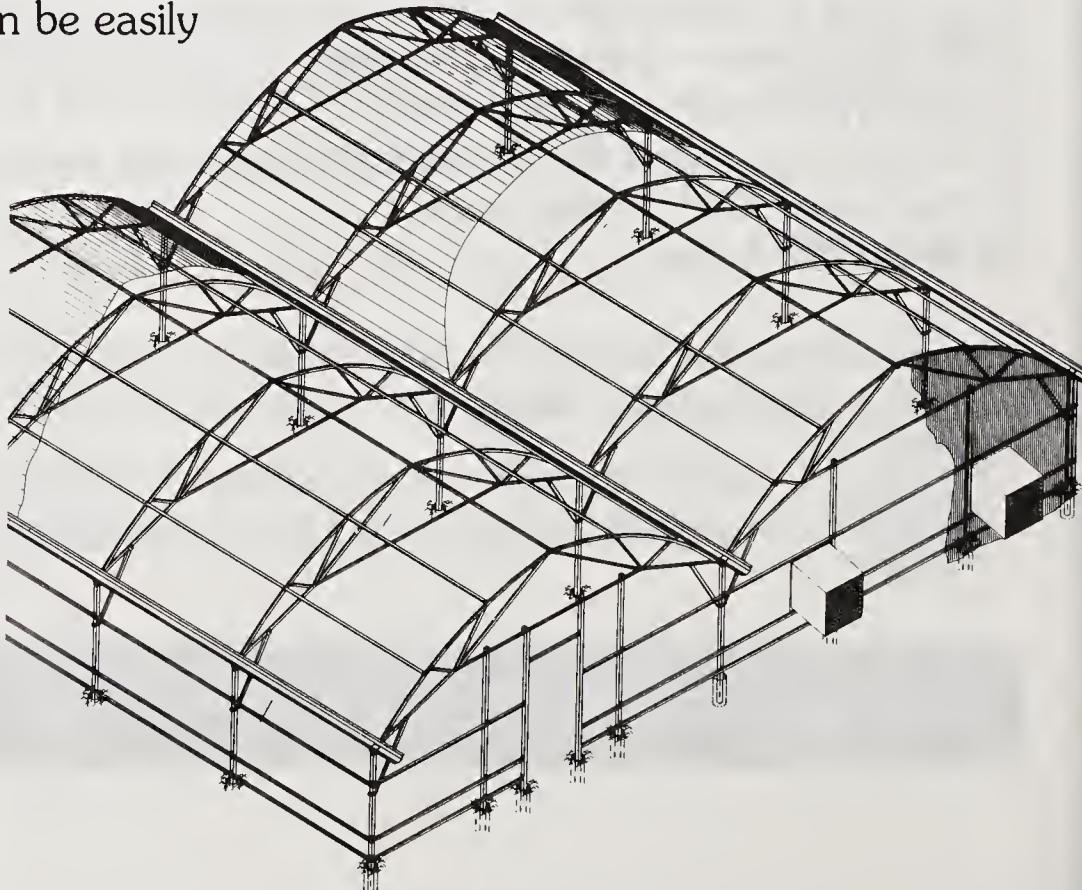
**ACS-003** (123 lbs) ..... **\$2450.00**

## XII. PROFESSIONAL MAXI-GROWROOM FRAMES

For the professional grower who needs maximum space, quality, and value for the square footage of coverage, this quick-assembly package is extremely attractive. Featuring a one piece welded truss made of 3" galvanized square tube-steel, multiple buildings can be adjoined at minimum cost.

Two widths are available: 20' and 30'. Any lengths can be selected in 10' or 12' ft. increments. Both have a rise of 8 ft. before the modified Gothic Arch truss, which ascends another 6 ft. for the 20' wide model and 8 ft. for the 30 ft. wide model. This modified truss allows a large air plenum into which air circulation systems can be installed. The inside slope of the Gothic minimizes dripping from condensation collection. Additional houses can be easily connected via the gutter, sharing a common wall and thus realizing appreciable savings.

Since every grower's needs are unique, we custom quote each inquiry. Please define the length, width, and number of growrooms desired. Instruction manual and certified engineered plans included.



## XIII. KEMP SHREDDER/CHIPPERS

Many gourmet mushrooms thrive on the trimmings from trees and garden wastes. This line of shredders are renowned for their quality and reliability. Constructed of heavy gauge steel, with an adjustable discharge door, reversible hardened steel teeth, anti-clog gate, and an exclusive stone ejector, three models of these shredders/chippers are offered. Great for producing wood chips or shredding straw. These shredders have up to twice the number of hammer-mill blades as many others. Shipped freight collect.



### 5 HP Master Gardener Shredder/Chipper

42 in. high, 47 in. long, 23 in. wide. Powered by 5 HP gas engine on four wheels.. 42 shredding teeth with chipper and side hopper that will chip branches up to 3 in. diameter. Comes with a centrifugal clutch.

**KSC5HP** (305 lbs.)..... \$1295.00

### 8 HP Rancher Shredder/Chipper Deluxe

45 in. high, 54 in. long, 27 in. wide. Powered by 8 HP gas engine on four wheels. 54 shredding teeth with chipper and side hopper that accepts branches up to 3 in. diameter. Kohler, industrial engine.

**KSC5HP** (305 lbs.)..... \$2195.00

### PTO Driven Shredder/Chipper

Similarly configured to the 8 HP Rancher Shredder/Chipper, this free standing Shredder/Chipper maximizes the power of your tractor. Fitted with the standard 540 PTO, this powerful shredder/chipper is excellent for farm production and maintenance. Framed 1 1/4 in. square steel. Chips faster than the 8 HP.

**KSCPTO** (340 lbs.)..... \$1595.00

## XIV. PROFESSIONAL PACKAGING & SHIPPING STATIONS

This complete packaging system allows the high speed weighing, wrapping, and shipping of fresh mushrooms to market. Backed by Hobart's renowned standard for quality, this labor-saving processing station reduces labor costs, assures accuracy in weighing, and eliminates waste. Stainless steel throughout.

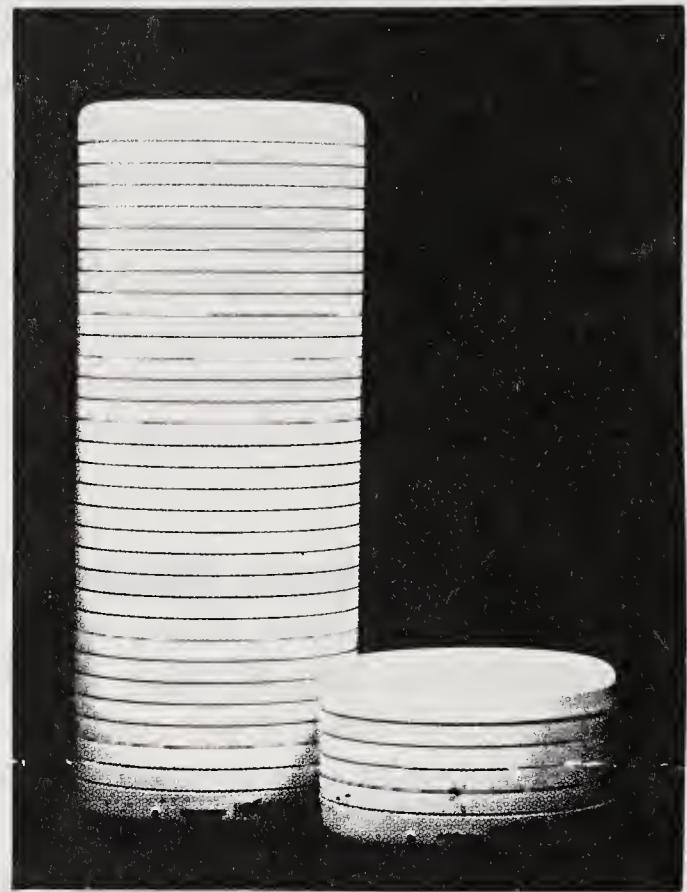
We also distribute the complete Hobart line of food service equipment, from mixers, grinders, scales to automatic wrapping stations. Give us the opportunity to beat any quoted price.

**PPSS**..... Call or Write for more information

## XV. MUSHROOM PRESERVATION

### **Expandable Food Dehydrator**

A remarkable food dehydrator, in fact, the best we've used. Each tray has one square foot of surface area. A single base unit can accommodate up to 30 trays from one thermostatically controlled, solid state heater. Mushrooms and other foods dry fast, evenly, and without getting that burnt-to-the-crisp look. Nutrition, flavor and texture preserved, economically. A fine unit for the gardener and mushroomer.



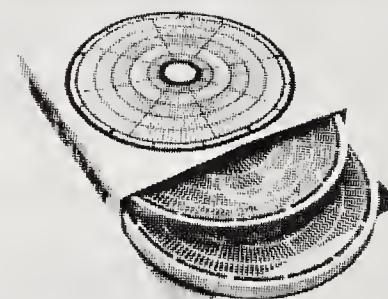
### **Garden Master Dehydrator 1000**

white, with 4 trays, expandable to 30 trays.

**GMD-1000** (30 lbs).....\$149.95

Additional trays, two per package.

**GMD-1002** (3 lbs) .....\$19.95



### **Drierite**

A highly absorbent dessicant excellent for low temperature drying of mushrooms. This dessicant absorbs dozens of times its mass in water. Also useful for keeping media and other components dry. Simply bake in oven and reuse. 6"mesh.

**White Drierite DRW-104** (7 lbs).....\$32.00

**Indicator Blue Drierite.** Blue in color when dry, reddish when saturated.

**DRB-204** (7 lbs).....\$40.00

**Phone: 206-426-9292      Fax: 206-426-9377**

## XVI. MUSHROOM HUNTING WARE/WEAR

### Collection Gear for the Complete Mushroomer



#### SHIRTS

##### Mushroom Sweatshirts:

A sweatshirt with the mushroom life cycle white on black displayed on a 100% cotton sweatshirt.

**SS-100 (2 lbs).....large \$22.00  
ex. large \$22.00**

##### Mushroom Life Cycle T-shirt:

The mushroom life cycle T-shirt white on black displayed on a 100% cotton shirt.

**TS-101 (1 lb.) .....small \$12.00  
TS-102 (1 lb.) .....medium \$12.00  
TS-103 (1 lb.) .....large \$12.00**

##### Fungi Perfecti Icon T-Shirt:

With Pacific Northwest mushroom icon, on a black shirt with blue lettering. 100% cotton.

**FPS-101 (1 lb.) .....small \$14.00  
FPM-102 (1 lb.) .....medium \$14.00  
FPL-103 (1 lb.) .....large \$14.00**

**Phone: 206-426-9292**

**Fax: 206-426-9377**

## Mushroom Magnifiers

This handy pocket magnifying lens set has seven different magnifications, ranging from 5 to 20 X. Since many of the features important to identifying mushrooms are only visible through the aid of a hand lens, the Mushroom Magnifier is an essential tool for any identifier of fungi. Made of ebony plastic, this versatile pocket magnifier is a worthy companion for the mushroomer in pursuit of their favorite fungi.



**MAG520** (.25 lbs.) ..... \$ 16.95

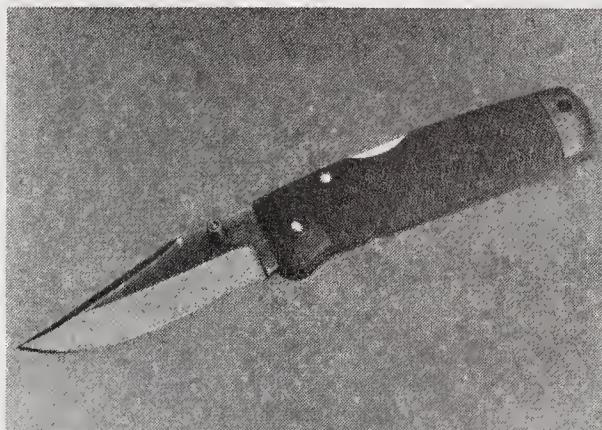
## Knives for the Adventurous Mushroom Hunter

**FP** carries three high quality knives for the intrepid mushroom hunter. Ideal for hiking, camping, and mushrooming, these knives are practical, high quality, and perfect for cutting and trimming mushrooms. Folks, it's a known fact that mushroomers tend to wander astray in the woods. A good knife is an essential companion for surviving. The owners of FP are avid hikers and depend upon these knives as you would. All are highly recommended!

### FP's Survival ToolClip

This all stainless steel ToolClip boasts 13 powerful features! Complete with full-jaw pliers, grippers, wire cutters (for cutting through the fences that separate you from your mushrooms), two razor sharp blades (one spearpoint broad and one serrated), two screw drivers, a cross-hatched file, ply bar, and the ever-essential bottle opener! Measures 5 1/4 L x 1 1/4 x .5 in. D.

**KMTC** (1 lb.) ..... \$ 59.95



### The Mushroom "Lite" Air Sog

A handy, lightweight, fast opening multi-purpose pocket knife, the Air Sog has an ambidextrous thumb stud that allows immediate access to its 3 1/4 in. super sharp stainless steel, straight edge blade. Overall length is 7 1/4 inches. Nylon pouch included.

**KMAS** (1 lb.) ..... \$ 39.95

## The NorthWest Mushroom Hunter's Choice

A finely crafted knife made from 440 stainless steel and featuring wrap around Kraton handles for non-slip grip. The blade measures 5 inches with an overall length of 9 3/4 inches. Complete with belt mounted nylon sheath with flip-button release safety strap, this knife endures the rigors of even the most nomadic mushroom hunter.

**KMHC** (1 lb.) ..... \$ 79.95



## XVII. MUSHROOM BOOKS

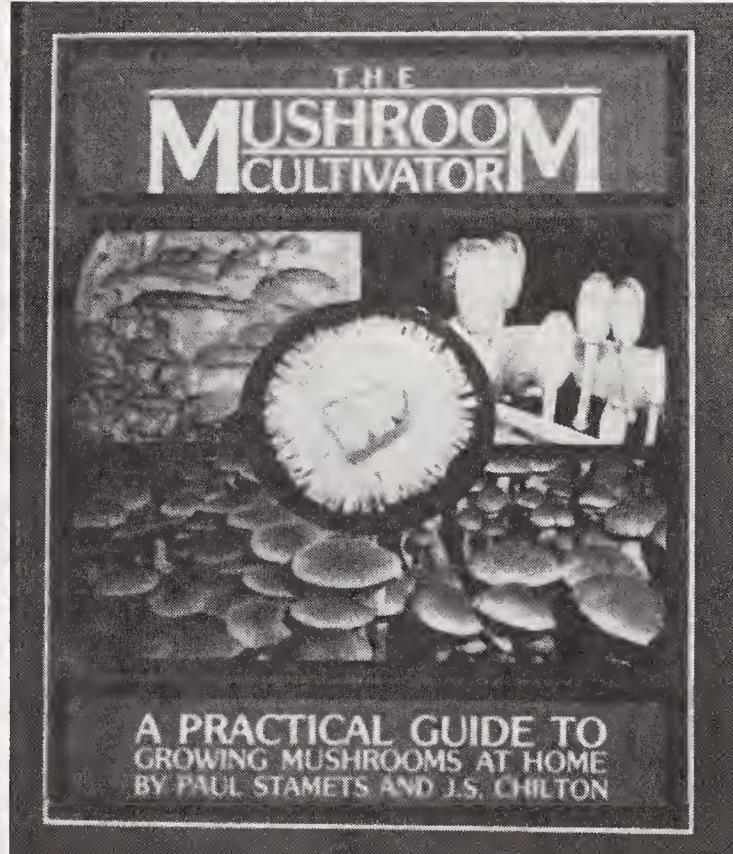
### CULTIVATION

#### The Mushroom Cultivator

by Paul Stamets and J.S. Chilton.

A magnum opus, covering the cultivation of 16 edible and psychoactive species and control measures for 40 genera of contaminants. Numbering 415 pages, with 249 black and white photographs, diagrams and scanning electron micrographs. Descriptions of sterile culture, spawn generation techniques, and fruiting strategies are covered in detail. Highly reviewed and used throughout the world as a textbook. As Dr. Alexander Smith once stated: "This book should be in every mycological laboratory."

**MCUL** (3 lbs) ..... \$ 29.95



**Growing Shiitake Mushrooms in a Continental Climate** by M.E. Kozak and J. Krawcyzk. Two Shiitake growers have pooled their experiences in this collaborative work. Commercial Shiitake growers have praised this book for its practical, direct approach. From their hands-on experiences, the authors present insightful short-cuts to make material handling of logs, their inoculation, incubation, and cropping an unawkward endeavor. This illustrated book is easy to read but will be beneficial to both beginners and professionals. 45 pages long. Appropriately printed on recycled paper.

**MGSM** (1 lb) ..... \$ 12.00

**Shiitake Grower's Handbook: The Art and Science of Mushroom Cultivation** by Paul Przybylowicz and John Donoghue. Yet another book specific to the needs of aspiring Shiitake growers. The authors have done a fine job of outlining the steps needed for selecting, inoculating, curing, and cropping logs. Each step is referenced so that the devotee can pursue additional data via the extensive bibliography. (Please note that this book does not address sterile culture or spawn generation techniques, assuming the growers buy spawn.) We welcome this contribution to mushroom culture. 217 pages.

**MSGH** (1 lb)..... \$ 24.95

**Is Shiitake Farming For You** by Rick Kerrigan. A friendly, realistic, succinct examination of Shiitake cultivation. Rick Kerrigan discusses standard methods of inoculating logs, and delves into formulas for determining the cost effectiveness of Shiitake farming. 23 pages.

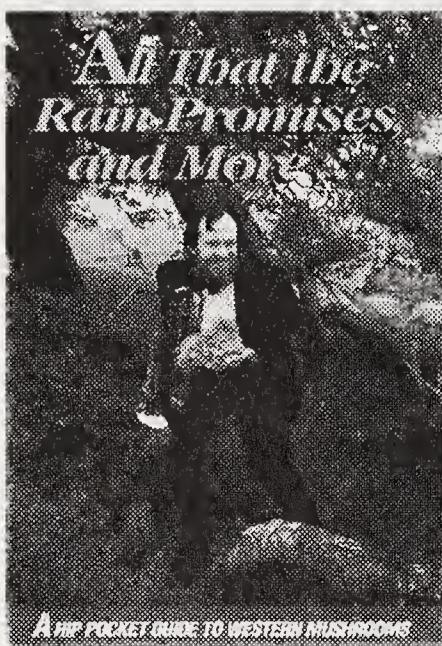
**MSH** (.5 lbs)..... \$ 5.00

**Mushrooms in the Garden** by Helmut Steineck. Translated from the original German edition, this book discusses what species you can cultivate in the garden. 151 pages.

**MGAR** (1 lb)..... \$ 16.95

## Field Guides/Identification/Taxonomy

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by DAVID ARORA  
Author of *Mushrooms Demystified*

**All The Rain Promises and More: A Hip Pocket Guide to Western Mushrooms**  
by David Arora.

Depicting 200 mushroom species of Western North America, this is an ideal field guide for the novice with no prior knowledge of mushrooms. Written by the author of **Mushrooms Demystified**, David Arora has succeeded in communicating the joy of mushrooming in this handy, 264 page book.

**MATRP** (1 lb.)..... \$ 15.95

**Mushrooms Demystified** by David Arora. A comprehensive and delightfully written book by an author whose pre-occupation with fungi borders on the extreme, this field guide is perhaps the most useful on the market. More than 2000 species are covered in 959 pages, with 800 photographs. Highly recommended.

**MDMA** (3.5 lbs)..... \$ 24.95

**The Audubon Field Guide to North American Mushrooms** by Gary Lincoff. Distinguished by its superior photographs (762 of them), this classic field guide covers 703 North American species in its 926 pages. Covering many species not in **Mushrooms Demystified**, these two books, in combination, are excellent companions for any mushroom hunter. Highly recommended.

**MASF** (2 lbs).....\$ 18.00

**Simon & Schuster's Guide to Mushrooms**

by Giovanni Pacioni, edited by Gary Lincoff. Originally published in Italy in 1980, this revised edition numbers 511 pages with 400 color photographs & species. (Note: 40 species in this book are not known to exist in North America). This book is recommended for the ardent collector of field guides and is not, by itself, as useful when compared to other books listed here.

**MSGM** (2 lbs).....\$ 12.95



**The Mushroom Hunter's Field Guide** by Dr. Alexander Smith and Nancy Weber Smith. Covering 282 species of the more common mushrooms of North America, this excellent field guide has been enlarged and expanded from its first printing in 1958. Most recently updated in 1980, **The Mushroom Hunter's Field Guide** is a standard to which all field guides are compared. Highly recommended. Clothbound. 316 pages.

**MHFG** (2 lbs).....\$ 19.95

**A Field Guide to Western Mushrooms** by Alexander Smith. Specific to the western North America, this field is similar in format to **The Mushroom Hunter's Field Guide** but concentrates on the species common to this region. Particular emphasis is placed on edible and poisonous species. Clothbound. 203 color plates in 280 pages. Highly recommended.

**MFGW** (2 lbs) .....\$ 19.95

**A Field Guide to Southern Mushrooms** by Nancy Weber Smith and Alexander Smith. This field guide, a third in a series by the Smiths, describes 241 species. The photographs are extraordinary, depicting species in their natural habitats. Similar in design to its predecessors, this book is specific to the southeastern United States in the broadest geographical sense. (The geographical region from the southern edge of Pennsylvania, along the Ohio River to its junction with the Mississippi, and westward to the eastern edge of the Great Plains. The Gulf of Mexico and the Atlantic Ocean defines the remaining boundaries.) 280 pages.

**MFGS** (2 lbs) .....\$ 19.95

**The New Savory Wild Mushroom** by Margaret McKenny and Dr. Daniel Stuntz. Revised by Dr. Joseph Ammirati. This best seller has been a favorite of many West Coast mushroom hunters. With 200 color plates, and numbering 264 pages, this manual is an excellent guide to the fungi of the Pacific Northwest.

**MSWM** (1 lb).....\$ 14.95

**A Morels Hunter's Companion** by Nancy Smith Weber. This book is a tribute to the mighty Morel. In the spring, the pursuit of this most prized group of mushrooms has become a national sport. Nancy Weber Smith delves into the subject with gusto, appealing to the amateur hunter yet possessing a technical depth that captures the interest of all professional mycologists. Also containing a short discussion of the history of Morel cultivation. 208 pages. 72 color plates. 12 diagrams.

**MMHC** (1 lb)..... \$ 14.95

**Mushrooms to Genus I: Macroscopic Features** by Dr. David Largent/Dr. Daniel Stuntz. A superb book for describing and defining the macroscopic features important in mushroom taxonomy, this is one in a series of books by Mad River Press we highly recommend. 86 pages. Black & white illustrations.

**MGI** (1 lb)..... \$ 13.95

**Mushrooms to Genus III: Microscopic Features** by Drs. David Largent, David Johnson, and Roy Watling. In our opinion, this book accomplishes a lot. In its 148 pages, the authors have pulled their knowledge to systematically describe and illustrate the microscopic features that are the basis of modern mushroom taxonomy.

**MGIII** (1 lb)..... \$ 15.95

**Mushrooms to Genus V: Cultural and Developmental Features** by Dr. Roy Watling. A manual for beginning mycology students, this book gives an overview of laboratory techniques for growing mushrooms. Comprehensive in the aspects of morphological development and cultural characteristics specific to various groups of fleshy fungi, this manual is helpful but is not by itself complete enough to be a stand-alone text book on cultivation. 169 pages with illustrations.

**MGV** (.5 lbs)..... \$ 12.95

**Mushrooms to Genus VI: Modern Genera** by Dr. David Largent and Dr. Timothy Baroni. A definitive treatise, numbering 277 pages, this book is significant for its careful attention to the features defining the modern concept of genus. Including a unique approach of viewing taxonomy from the perspective of habitat, this book has extensive taxonomic keys and microscopic descriptions. Highly recommended.

**MGVI** (1 lb)..... \$ 22.95

#### **FP's Ambidextrous Spore Print File and Index Booklet**

A unique approach for collecting spore prints, this spirally bound booklet features pages with 1 cm. metric grids upon which spores can be collected. One side page is lined for taking notes while the facing page is 1/2 grey-black and 1/2 white, allowing easy determination of spore color. The right edge of each page has tab grids which allow the collector to cross correlate similarities. 30 pages.

**MSPF** (1 lb.)..... \$ 7.00

**Phone: 206-426-9292      Fax: 206-426-9377**

## General Interest

### Icones of Medicinal Fungi, Science Press.

This is the most extensive description of the fungi used for medicinal purposes in China. An impressive work, beautifully illustrated with 272 color plates, this much sought after book has been difficult to impossible to acquire in this country. This book makes a strong statement of the Chinese view of fungi as medicinal food. Definitely a collector's item.

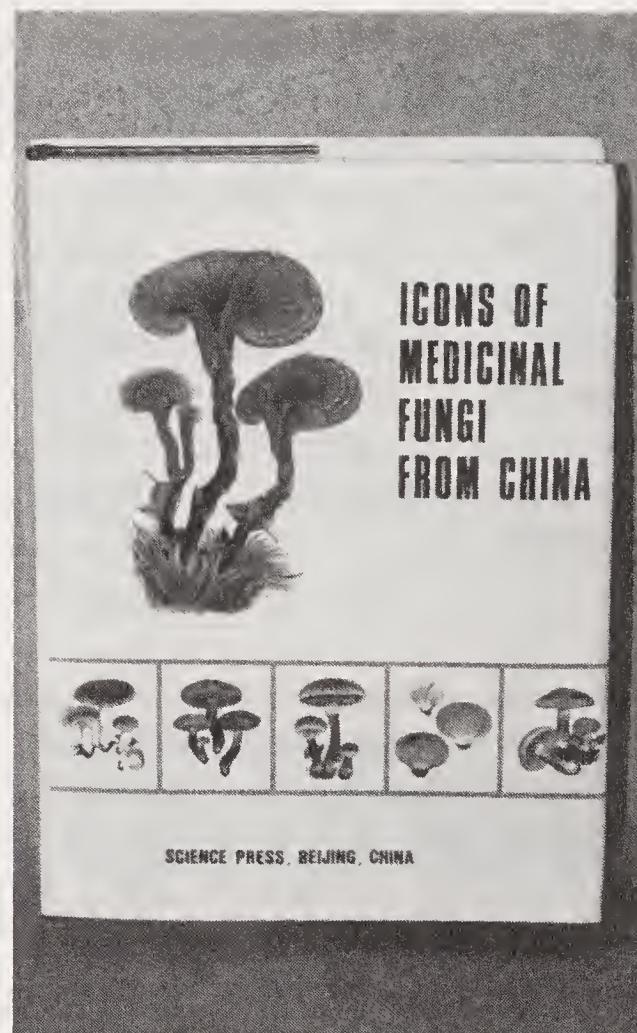
**MICON** (5 lbs).....\$ 105.00

### Reishi Mushroom: Herb of Spiritual Potency and Medical Wonder

This book examines the history and use of Reishi, known by the Chinese as Ling Chi, and to mycologists as *Ganoderma lucidum*. Full of anecdotal reports, Dr. Terry Willard discusses the medical properties of Reishi, its heralded place in Eastern history and medicine. This book is an excellent introduction to Reishi. If it has any limitations, it would have to be its unreserved endorsement of Reishi's medical virtues, without attention to studies questioning its medical properties. Despite this shortcoming, this book is entertaining and informative. 167 pages. 8 pages of color plates.

**MRHW** (1 lb.).....\$ 16.95

(We can search for more erudite treatises on mushroom taxonomy and cultivation. If you need a particular title, perhaps we can help. Please write.)



**Mushrooms For Color** by Miriam Rice. The wonderful thing about studying mushrooms is that there seems to be no end to their diverse uses. In this book, Miriam Rice shows how mushrooms can be a fantastic source for dyes. The colors derived from mushrooms span the rainbow. She outlines the techniques for extracting and fixing colors to silk, cotton, or wool. 154 pages.

**MCOL** (1 lb).....\$ 15.95

### The Glossary of Mycology, Revised Edition

An essential reference for every student of mycology, this thorough glossary not only defines mycological terms but gives insight to the root origins of each word. This revised edition is highly recommended to both cultivators and collectors alike. The authors, Snell and Dick, have made a significant contribution to mushroom education with this treatise. 215 pages. (Quantities limited. We bought the remainder of the press run.)

**MGMS** (2 lbs.) .....\$ 29.95

## COOKBOOKS

**Wild Mushroom Cookery** by The Oregon Mycological Society, edited by Mike Wells and Maggie Rogers. Designed much like a field guide, by addressing the Great Edibles individually by species, this compendium of recipes is guaranteed to make any mycophagist (=mushroom eater) salivate. This author particularly likes the "Shrimp and Morel Sauce for Pasta" and the "Chinese Shiitake Soup". A great book by great people. Spirally bound. 203 pages.

**MWMC** (2 lbs)..... \$ 14.95

**Wild About Mushrooms for Foresters & Feasters** by Louise and Bill Freedman. With the help of many of their friends in the Mycological Society of San Francisco, the Freedman's have compiled an extraordinarily good cookbook. More than 150 recipes are covered in its 244 pages.

**MWAM** (2 lbs)..... \$ 12.95

**Joe's Book of Mushroom Cookery** by Jack Czarnecki. More than 300 recipes are covered in this popular guide to cooking gourmet mushrooms. Written by a professional restauranteur, this superb book is complete enough to be enjoyed by both amateur and professional mycologists. 340 pages. 8 pages color.

**MJBM** (2 lbs)..... \$ 14.95

### Chef's Design Maxi-Griddle

For the family who loves stir frying on a grill, the Maxi-Griddle is an inexpensive entry into the realm of connoisseur cooking. Placed directly over stove top burners, its 13" x 20" surface quickly and evenly heats up. Featuring the latest technological breakthrough in non-stick surfaces, this flattop minimizes the need for oil and makes clean-up a breeze. Highly recommended for the mushroomer who loves feasting on their successes. Also superb for baking or broiling foods in the oven.



**CW-1320** (8 lbs.) ..... \$ 39.95

Shipping - \$5.00

## MISCELLANEOUS BOOKS

Like many of you, we share a strong interest in the tissue culture of plants. Much of the equipment and concepts in this catalogue parallel that of the plant tissue culture industry. Hence, we also sell the following books specific to that field.

**Plants from Test Tubes** by Lydiane Kyte. A comprehensive book on plant tissue culture, this book describes in depth the media formulations, cloning techniques, and methods for expanding a single plant into thousands. 34 species of plants are detailed. Hardcover.

**MPTT** (2 lbs)..... \$ 24.95

**Introduction to In Vitro Propagation** by D F. Wetherell. Addressing the basic techniques of plant tissue culture, this manual addresses both those working in a home-based laboratory as well as the commercial or research laboratory. 87 pages.

**MIIV** (1 lb)..... \$ 12.95

## XVIII. ORDERING INFORMATION

### U.S. / Select Canadian Orders

We send orders via United Parcel Service unless requested not to. To calculate shipping charges and to avoid COD shipping fee, customers can determine exact costs for any given item by using the following system.

1. Using the first three digits of your Zip code, determine the zone in which you are.
2. Calculate the total weight of the items ordered.
3. Determine the shipping charges by correlating the zone and the weight.
4. Add this amount to your order for shipping.

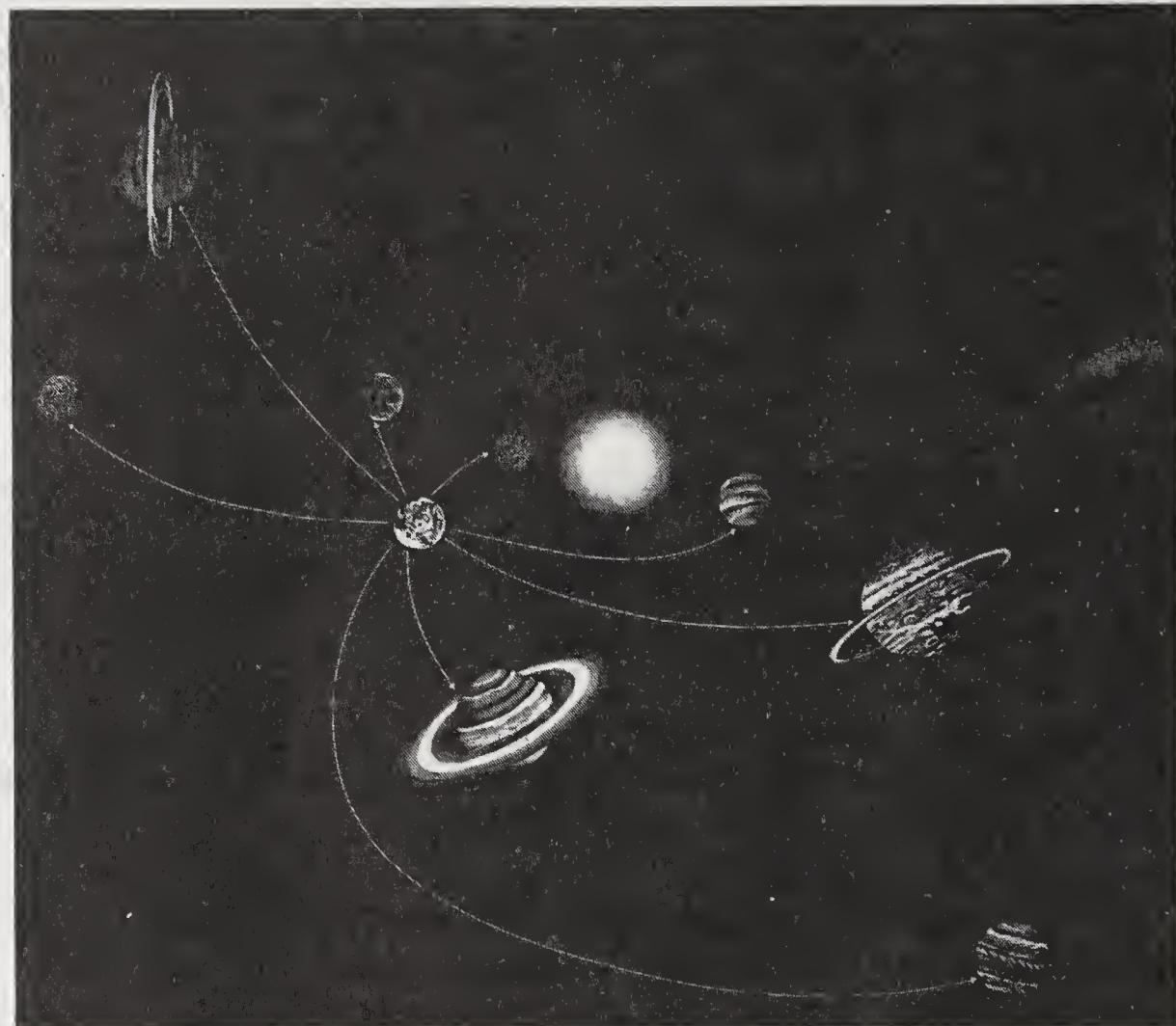
We do not sell products on a COD basis. We reserve the right to change prices according to fluctuations in costs. Full refunds given if customer returns items in good condition, unused, within 10 days of purchase. After 10 days, a 25% re-stocking charge can be assessed. Within 10 days, refunds on credit card orders will be 96% of value. (4% fee for processing) Should you have any questions, please call. Shipping Charges non-refundable.

### International Customers

We ship to countries throughout the world every day, via air cargo on a "space available basis" through our brokerage firm Kuehne & Nagel, Seattle, Washington. Transit times are usually 3-6 days from time of shipment. The customer usually pays for shipping costs at the time the products are delivered. For example, a Series II Laminar Flow Hood cost \$230.00 to ship to Switzerland, a Series III costs \$310 to Germany. Six cartons of miscellaneous laboratory equipment weighing 400 lbs. cost \$325.00 to Holland. These prices fluctuate and we will inform the customer prior to shipment the exact cost incurred. All shipments are insured. All are marked "For Agricultural Use Only". Our FAX machine doesn't sleep. We do. **So, please FAX us your order at 206-426-9377 at any time.**

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Fungi  
Perfecti  
shipping  
routes to  
be  
published  
when  
available.



The greatest achievement of science this century:  
the acknowledgement of our ignorance

# XIX. SHIPPING RATES & DESTINATION CHARTS



## GROUND SERVICE ZONE CHART

For Shippers with ZIP Codes 980-01 to 982-99

### Service to 48 Continental United States

To determine zone, take first three digits of ZIP Code to which parcel is addressed and refer to chart below.

ZIP CODE PREFIXES	UPS ZONE	ZIP CODE PREFIXES	UPS ZONE	ZIP CODE PREFIXES	UPS ZONE
010-089	8	600-668	7	813	6
		669	6	814-831	5
100-199	8	670-673	7	832-834	4
		674-693	6	835	3
200-299	8			836-837	4
		700-709	8	838	3
300-339	8	710-711	7	840-847	5
342-399	8	712-714	8	850-859	6
		716-722	7	860	5
400-462	8	723	8	863	6
463-466	7	724-737	7	864	5
467-489	8	738-739	6	865-884	6
490-491	7	740-758	7	890-893	5
492	8	759	8	894-898	4
493-499	7	760-769	7		
		770-777	8	900-919	5
500-504	7	778	7	920-921	6
505	6	779	8	922-954	5
506-508	7	780-782	7	955	4
510-516	6	783-785	8	956-958	5
520-539	7	786-788	7	959-961	4
540	6	789	8	970-972	2
541-549	7	790-791	6	973-974	3
550-558	6	792-797	7	975-976	4
559	7	798-799	6	977-978	3
560-576	6			979	4
577	5	800-802	6	980-986	2
580-584	6	803-805	5	988-989	2
585-593	5	806-811	6	990-994	3
594-599	4	812	5		

See separate charts for UPS Next Day Air (where available), 2nd Day Air and Service to Canada. Air service is provided to all points in Hawaii.

## UPS Ground Service

Commercial Deliveries Delivery to a place of business†								
WEIGHT NOT TO EXCEED	ZONES							
	2	3	4	5	6	7	8	
1 lb.	\$ 2.08	\$ 2.22	\$ 2.42	\$ 2.50	\$ 2.58	\$ 2.65	\$ 2.71	
2	2.10	2.24	2.67	2.76	2.95	3.05	3.27	
3	2.19	2.40	2.84	2.98	3.22	3.39	3.68	
4	2.28	2.53	2.96	3.14	3.41	3.62	4.00	
5	2.38	2.64	3.03	3.21	3.56	3.79	4.21	
6	2.48	2.72	3.08	3.26	3.66	3.96	4.36	
7	2.58	2.78	3.13	3.31	3.76	4.13	4.60	
8	2.68	2.83	3.18	3.37	3.89	4.38	4.97	
9	2.77	2.91	3.23	3.46	4.08	4.70	5.38	
10	2.86	2.99	3.28	3.63	4.31	5.03	5.75	
11	2.94	3.08	3.36	3.86	4.57	5.38	6.20	
12	3.02	3.18	3.47	4.07	4.89	5.73	6.63	
13	3.09	3.29	3.64	4.29	5.18	6.11	7.07	
14	3.16	3.41	3.82	4.51	5.47	6.46	7.51	
15	3.23	3.55	4.00	4.74	5.75	6.83	7.95	
16	3.30	3.70	4.18	4.98	6.06	7.19	8.38	
17	3.37	3.84	4.36	5.19	6.34	7.55	8.82	
18	3.44	3.97	4.53	5.42	6.63	7.92	9.25	
19	3.55	4.10	4.71	5.63	6.94	8.28	9.69	
20	3.68	4.24	4.89	5.87	7.22	8.63	10.13	
21	3.82	4.38	5.07	6.10	7.51	9.01	10.57	
22	3.93	4.53	5.24	6.31	7.80	9.36	11.01	
23	4.05	4.65	5.42	6.54	8.10	9.72	11.43	
24	4.16	4.80	5.59	6.76	8.39	10.09	11.88	
25	4.27	4.92	5.76	6.99	8.67	10.46	12.31	
26	4.37	5.07	5.95	7.22	8.98	10.80	12.75	
27	4.48	5.22	6.13	7.44	9.26	11.18	13.20	
28	4.55	5.36	6.30	7.66	9.56	11.54	13.62	
29	4.64	5.49	6.48	7.89	9.85	11.90	14.08	
30	4.75	5.61	6.67	8.14	10.18	12.30	14.56	
31	4.85	5.76	6.89	8.40	10.51	12.69	15.03	
32	4.94	5.91	7.08	8.67	10.84	13.10	15.51	
33	5.04	6.06	7.29	8.93	11.17	13.49	15.99	
34	5.13	6.22	7.48	9.14	11.48	13.88	16.47	
35	5.23	6.38	7.64	9.37	11.77	14.29	16.92	
36	5.32	6.53	7.82	9.61	12.07	14.64	17.38	
37	5.41	6.68	8.01	9.83	12.36	15.02	17.82	
38	5.46	6.81	8.18	10.07	12.67	15.38	18.27	
39	5.54	6.93	8.37	10.28	12.96	15.75	18.71	
40	5.64	7.06	8.54	10.52	13.25	16.13	19.15	
41	5.72	7.20	8.71	10.74	13.55	16.49	19.59	
42	5.82	7.34	8.90	10.98	13.84	16.85	20.03	
43	5.90	7.47	9.08	11.20	14.15	17.23	20.48	
44	5.99	7.63	9.26	11.42	14.44	17.58	20.92	
45	6.07	7.76	9.44	11.65	14.73	17.95	21.37	
46	6.18	7.91	9.62	11.89	15.03	18.33	21.81	
47	6.26	8.04	9.80	12.11	15.33	18.70	22.26	
48	6.33	8.16	9.98	12.34	15.60	19.06	22.65	
49	6.39	8.26	10.16	12.56	15.84	19.40	23.04	
50	6.47	8.36	10.28	12.73	16.06	19.71	23.42	
51	6.51	8.44	10.37	12.85	16.23	19.91	23.70	
52	6.54	8.48	10.43	12.91	16.36	20.02	23.85	
53	6.56	8.52	10.49	12.97	16.44	20.13	23.98	
54	6.59	8.55	10.53	13.04	16.51	20.23	24.08	
55	6.62	8.58	10.57	13.10	16.59	20.33	24.18	
56	6.64	8.61	10.62	13.15	16.66	20.41	24.28	
57	6.66	8.65	10.66	13.20	16.73	20.49	24.38	
58	6.68	8.68	10.70	13.26	16.80	20.58	24.48	
59	6.71	8.72	10.75	13.31	16.88	20.67	24.58	
60	6.73	8.75	10.79	13.37	16.96	20.76	24.69	
61	6.75	8.77	10.84	13.43	17.03	20.85	24.80	
62	6.78	8.80	10.90	13.49	17.11	20.94	24.90	
63	6.81	8.82	10.94	13.55	17.18	21.03	25.02	
64	6.83	8.84	10.99	13.60	17.25	21.14	25.12	
65	6.85	8.86	11.04	13.66	17.33	21.24	25.22	
66	6.88	8.88	11.08	13.72	17.40	21.33	25.35	
67	6.90	8.90	11.12	13.78	17.47	21.43	25.46	
68	6.92	8.92	11.17	13.83	17.54	21.52	25.56	
69	6.94	8.94	11.21	13.91	17.62	21.62	25.67	
70	6.96	8.96	11.25	13.96	17.68	21.72	25.79	

Residential Deliveries  
Delivery to a home†

WEIGHT NOT TO EXCEED	ZONES							
	2	3	4	5	6	7	8	
1 lb.	\$ 2.53	\$ 2.67	\$ 2.87	\$ 2.95	\$ 3.03	\$ 3.10	\$ 3.16	
2	2.55	2.69	3.12	3.21	3.40	3.50	3.72	
3	2.64	2.85	3.29	3.43	3.67	3.84	4.13	
4	2.73	2.98	3.41	3.59	3.86	4.07	4.45	
5	2.83	3.09	3.48	3.66	4.01	4.24	4.66	
6	2.93	3.17	3.53	3.71	4.11	4.41	4.81	
7	3.03	3.23	3.58	3.76	4.21	4.58	5.05	
8	3.13	3.28	3.63	3.82	4.34	4.83	5.42	
9	3.22	3.36	3.68	3.91	4.53	5.15	5.83	
10	3.31	3.44	3.73	4.08	4.76	5.48	6.20	
11	3.39	3.53	3.81	4.31	5.02	5.83	6.65	
12	3.47	3.63	3.92	4.52	5.34	6.18	7.08	
13	3.54	3.74	4.09	4.74	5.63	6.56	7.52	
14	3.61	3.86	4.27	4.96	5.92	6.91	7.96	
15	3.68	4.00	4.45	5.19	6.20	7.28	8.40	
16	3.75	4.15	4.63	5.43	6.51	7.64	8.83	
17	3.82	4.29	4.81	5.64	6.79	8.00	9.27	
18	3.89	4.42	4.98	5.87	7.08	8.37	9.70	
19	4.00	4.55	5.16	6.08	7.39	8.73	10.14	
20	4.13	4.69	5.34	6.32	7.67	9.08	10.58	
21	4.27	4.83	5.52	6.55	7.96	9.46	11.02	
22	4.38	4.98	5.69	6.76	8.25	9.81	11.46	
23	4.50	5.10	5.87	6.99	8.55	10.17	11.88	
24	4.61	5.25	6.04	7.21	8.84	10.54	12.33	
25	4.72	5.37	6.21	7.44	9.12	10.91	12.76	
26	4.82	5.52	6.40	7.67	9.43	11.25	13.20	
27	4.93	5.67	6.58	7.89	9.71	11.63	13.65	
28	5.00	5.81	6.75	8.11	10.01	11.99	14.07	
29	5.09	5.94	6.93	8.34	10.30	12.35	14.53	
30	5.20	6.06	7.12	8.59	10.63	12.75	15.01	
31	5.30	6.21	7.34	8.85	10.96	13.14	15.48	
32	5.39	6.36	7.53	9.12	11.29	13.55	15.96	
33	5.49	6.51	7.74	9.38	11.62	13.94	16.44	
34	5.58	6.67	7.93	9.59	11.93	14.33	16.92	
35	5.68	6.83	8.09	9.82	12.22	14.74	17.37	
36	5.77	6.98	8.27	10.06	12.52	15.09	17.83	
37	5.86	7.13	8.46	10.28	12.81	15.47	18.27	
38	5.91	7.26	8.63	10.52	13.12	15.83	18.72	
39	5.99	7.38	8.82	10.73	13.41	16.20	19.16	
40	6.09	7.51	8.99					

## XX. DATA TABLES

### DATA TABLES

1 Boiler hp = 3.5 lb. water evap. per hr from and at 212 deg F.

1 Gal. water yields 8,000 BTU per hr from and at 212 deg. F.

1 Gal. water yields 2,016,000 calories.

1 BTU = 252 calories = the heat energy to raise 1 lb. water 1 degrees F.

1 Calorie = the heat energy to raise 1 liter of water 1 degree C.

1 Kwhr = 3413 BTU      Watts = Amps x Volts

1 liter water = 1,000 ml. = 1,000 grams.

1 cu. ft. water = 62.41 lbs. at 50 degrees F.

1 gallon water = 8.34 lbs.

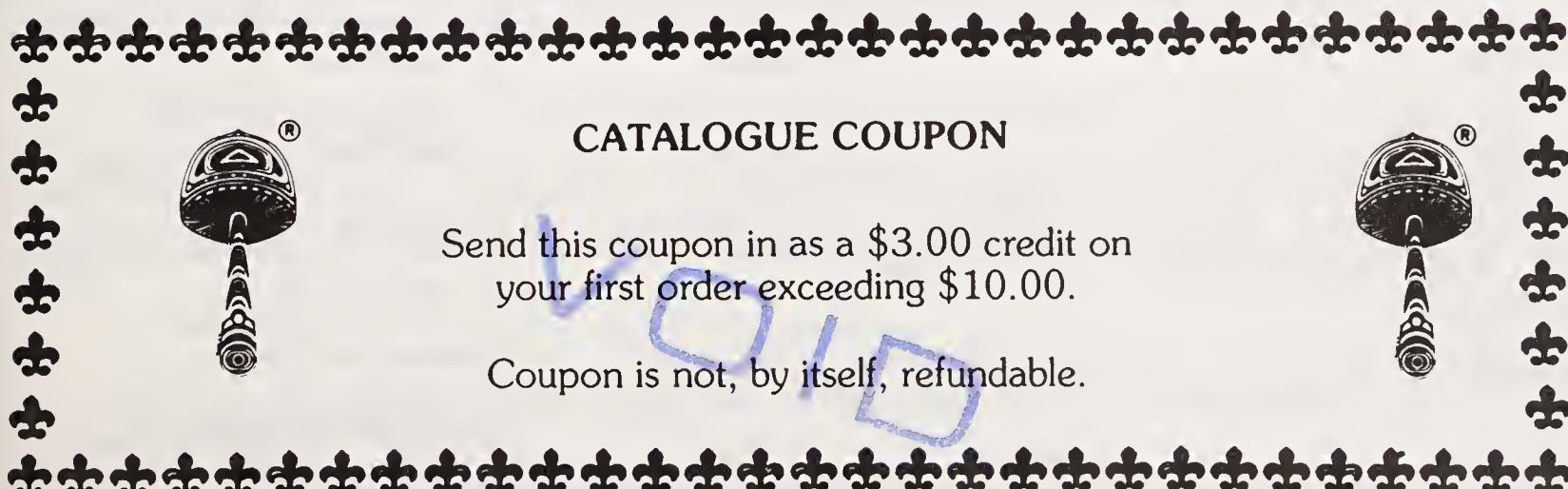
### Grain/Water Formulae

Quart Mason Jars -

210 grams rye      (275 ml.)  
145 grams H<sub>2</sub>O      (145 ml.)

1/2 Gallon Mason Jars -

560 grams rye      (700 ml.)  
240 grams H<sub>2</sub>O      (240 ml.)



## ORDER FORM

**Minimum Order \$10.00**

All orders sent UPS unless otherwise specified.  
**Mastercard and Visa accepted.**

F.P., INC. P.O. Box 7634 - Olympia, WA 98507

Rush to:

Customer No. \_\_\_\_\_ Invoice Enclosed \_\_\_\_\_

#### **MANDATORY LIABILITY RELEASE**

I, the purchaser, by ordering items from FUNGI PERFECTI, hereby release this corporation and its employees from all liability associated with the use of their products. I do so fully aware of the consequences thereof.

I agree not to represent their products to third parties without Fungi Perfecti's written consent.

I hereby take responsibility for the proper handling, use, location, safety, and disposal of any and all chemical related products contained herein.

I agree to abide by their stated policy that cultures and spawn supplied by Fungi Perfecti will not be used for generating more of the same for resale unless by written, contractual agreement. Unless otherwise agreed upon, such items are being sold to individuals for their own personal, non-commercial consumer-related use.

I am over the age of 18. I have read and understand this liability release and signify my agreement to these terms by the mere fact I have ordered them on the reverse side of this form.

## ORDER FORM

**Minimum Order \$10.00**

All orders sent UPS unless otherwise specified.  
**Mastercard and Visa accepted.**

**FUNGI PERFECTI**  
P.O. Box 7634  
Olympia, Washington 98507  
**(206) 426-9292**

## MANDATORY LIABILITY RELEASE

I, the purchaser, by ordering items from FUNGI PERFECTI, hereby release this corporation and its employees from all liability associated with the use of their products. I do so fully aware of the consequences thereof.

I agree not to represent their products to third parties without Fungi Perfecti's written consent.

I hereby take responsibility for the proper handling, use, location, safety, and disposal of any and all chemical related products contained herein.

I agree to abide by their stated policy that cultures and spawn supplied by Fungi Perfecti will not be used for generating more of the same for resale unless by written, contractual agreement. Unless otherwise agreed upon, such items are being sold to individuals for their own personal, non-commercial consumer-related use.

I am over the age of 18. I have read and understand this liability release and signify my agreement to these terms by the mere fact I have ordered them on the reverse side of this form.

## NUTRITIONAL VALUE OF MUSHROOMS

Many myths have been spread about mushrooms. One of the most inaccurate is that mushrooms have no nutritional value. To properly consider them for their nutritional benefits, they must be viewed from a dried weight perspective. And mushrooms give you maximum nutritional benefit only upon cooking.

Mushrooms are relatively high in protein, averaging about 20% of their dried mass. Further they contribute a wide range of essential amino acids. Low in fat (between 2-8%) and high in fiber, mushrooms also provide several groups of vitamins, particularly thiamine, riboflavin, niacin, biotin, and ascorbic acid. Now that research is unveiling that many of these species also stimulate the human immune systems, mushrooms are clearly becoming the gourmet health food of the 1990's.

## ORDER FORM

**Minimum Order \$10.00**

All orders sent UPS unless otherwise specified.  
**Mastercard and Visa accepted.**

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